L & W INDUSTRIES

THE EXPERIENCED ALTERNATIVE

3149 EAST CHESTNUT EXPRESSWAY
SPRINGFIELD, MO 65802

800-852-5587
417-864-5411
417-864-4473 (FAX)
E-Mail: sales@lwind.com

L & W INDUSTRIES

QUICK SHIP PROGRAM

24-48 HOUR SHIPMENTS

L&W has committed to maintaining in stock certain items used in the daily maintenance and installation of your signal system.

The QUICK SHIP items are marked in the catalog with an asterisk (*)by the product description and LW Part Number.

In most cases, these products can be shipped within 24 or 48 hours from receipt of the order.

HOW TO ORDER
OR RECEIVE QUOTATION

- *CALL OUR SALES OFFICE*
  1-800-852-5587
  1-417-864-5411
- *FAX*
  1-417-864-4473
- *E-MAIL*
  SALES@LWIND.COM
- *MAIL*
  3149 E CHESTNUT EXP
  SPRINGFIELD, MO 65802

L&W ACCEPTS VISA AND MASTERCARD

L & W INDUSTRIES

RECEIVED
SEP 24 1999

INTRODUCTION
TERMS & CONDITIONS

COMPANY BACKGROUND

L&W Industries has been manufacturing signal products for over 30 years, offering our railroad customers a full line of quality signal products & services.

All products are manufactured at our centrally located 50,000 square foot facility in Springfield, Missouri.

QUALITY ASSURANCE

L&W Industries has a full Quality Assurance program in place and is NAPM M-1003 Approved.

DELIVERY & SHIPPING

Delivery, shipment and installation dates are estimated dates only, and unless otherwise specified are figured from the day of receipt of order or date of receipt of technical information or approved drawings. The latest date applies.

L&W shall not be held liable for delays of carriers, delays for labor stoppage, difficulties, shortages, or strikes, nor shall L&W be held liable for fires, accidents, failure or delay in obtaining materials, acts of government, weather, or any causes beyond our control.

Unless otherwise specified in writing, materials will be packaged as L&W deems proper for protection against normal handling. There will be a charge for any special requests for additional packaging or handling.

Routing will be at our discretion unless otherwise specified by customer in writing.

All shipments are FOB our plant, delivery of goods to the initial carrier will constitute delivery to you and all goods will be shipped at your risk. A claim for loss or damage in transit must be entered with the carrier and prosecuted by you.

WARRANTY

All L&W Industries manufactured products have a warranty against materials defects and workmanship for a period of one year from date of shipment from L&W. L&W Industries entire warranty obligation is limited to either repair or replacement of any equipment which is returned within the warranty period and which L&W Industries finds defective.

For equipment not manufactured by L&W Industries, the warranties of the manufacturers of such equipment will apply. The warranties are assigned to the purchaser without recourse to L&W Industries.

Return of equipment to L&W Industries is at the buyers risk and expense. Equipment can not be returned without approval of L&W Industries and issue of a Materials Return Authorization form.

Alteration or removal of serial number or identification numbers or markings voids the warranty.

Warranty will not apply to products or components which have been subject to abuse, alteration, improper handling or installation, or which have not been operated in accordance to any instructions issued by L&W Industries

ORDER CANCELLATION & RESTOCKING

Purchase orders cancelled before shipment may be accepted at L&W's discretion at no cost to the buyer if the material is standard stock item, equipment has not been modified, or the cancellation is not of such magnitude as to bring additional cost to L&W. If these conditions do not prevail, a restocking charge will be implemented.

A restocking charge of 15% of the total sell price will apply on material returned to L&W for credit and/or exchange. The following must apply. Material is standard L&W stock. L&W evaluates the material as still being in new condition. The return is approved by L&W. L&W reserves the right to refuse returns if it creates an overstock situation at L&W. Material returned for restocking will be at buyers expense. A Materials Return Authorization must be issued by L&W prior to return of materials.

L & W INDUSTRIES

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L & W INDUSTRIES

CIRCUIT DESIGN

L&W Industries Engineering Group has provided
Circuit Design Services to
Class One Railroads, Regional, Transits and Short Lines
for 30 years.

Projects include Highway Crossings, CTC Systems, Electrocode, Local Control Interlockings, APB Signal Systems, Remote Controlled Interlockings, Automatic Interlocking Repair and FRA Testing, and Radio Controlled Switches.

In addition, L&W offers drafting and circuit revision services. All work is done on AutoCad

FACTORY WIRING

L & W's experienced wiremen can Factory Wire your instrument enclosures to your specifications with the equipment you specify.

Our crews have wired instrument enclosures for 25 years for Highway Crossing Projects, Hot Box Detectors, End of Sidings and Intermediate Signal Locations.

L&W has wired over 1,000 Instrument Enclosures for AEI locations.

MATERIALS PROJECT PACKAGING & WAREHOUSING

In addition to Circuit Design and Factory Wiring, L&W can take your project one step further by Sourcing, Procuring, Warehousing and Packaging your project materials for direct shipment to the project location on an L&W Truck or Container.

REBUILDING SERVICES

L & W offers complete rebuilding services for switch machines, controllers and switch locks. Also, shelf and plug in relays.

All products are rebuilt to the original specifications by experienced personnel

L & W INDUSTRIES

WAYSIDE

SIGNALS

VERTICAL STACKED COLORLIGHTS
TRIANGULAR COLORLIGHTS
DWARF SIGNALS
MAST, LADDERS, & BASES
SIGNAL HOUSE-TOP MOUNTED SIGNALS
DOUBLET LENSE ASSEMBLIES
PHANKILL ASSEMBLIES
SIGNAL MOUNTING BRACKETS
SIGNS, NUMERALS & LETTERS
SPECIALTY SIGNALS
SLOT COVER PLATES
REPLACEMENT PARTS

A
A
A
A
A
A
A

REAR REMOVABLE DOUBLETS

L & W INDUSTRIES

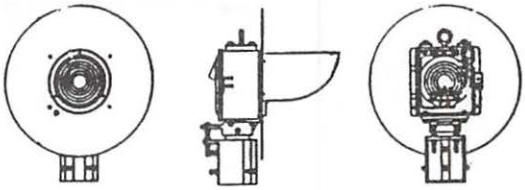
COLORLIGHT SIGNAL HEADS

VERTICAL STACK

When ordering L & W colorlights please specify the color of the aspects. The vertical signals shown on this page have rear removable doublet lens assemblies.

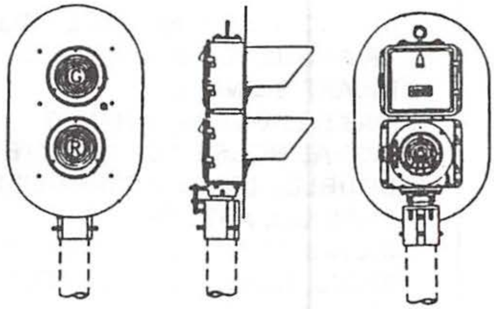
ONE POSITION COLORLIGHT SIGNAL HEAD. 5" TOP OF MAST MOUNTING.

PART NO. 5D8100



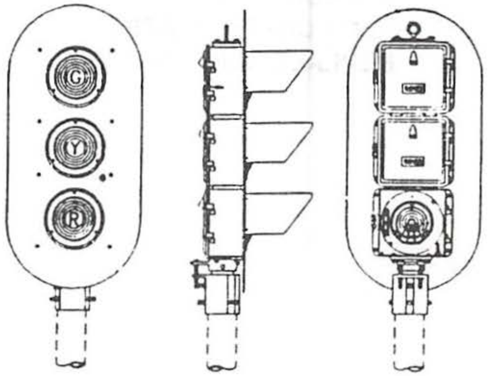
TWO POSITION COLORLIGHT SIGNAL HEAD. 5" TOP OF MAST MOUNTING.

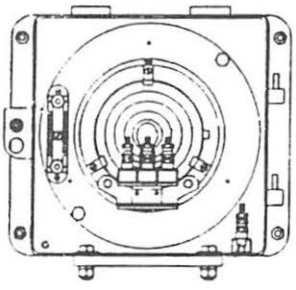
PART NO. 5D8200



THREE POSITION COLORLIGHT SIGNAL HEAD. 5" TOP OF MAST MOUNTING.

PART NO. 5D8300



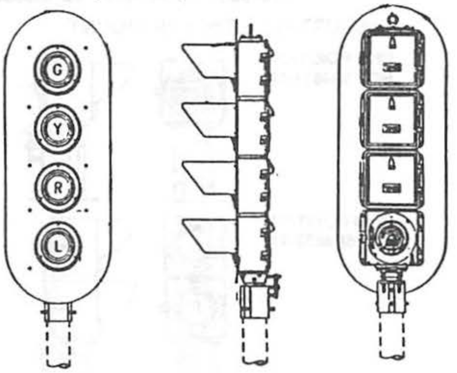


COLORLIGHT SIGNAL HEADS

VERTICAL STACK (CONT.)

FOUR POSITION COLORLIGHT SIGNAL HEAD. 5" TOP OF MAST MOUNTING.

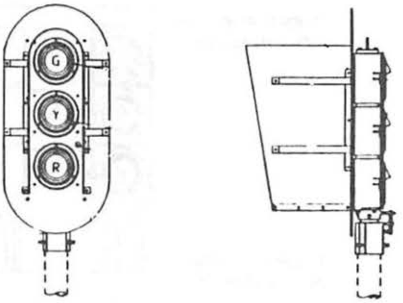
PART NO. 5D8400



TWO POSITION COLORLIGHT SIGNAL HEAD. 5" TOP OF MAST MOUNT, WITH SNOW SHIELD
PART NO. 5D8206

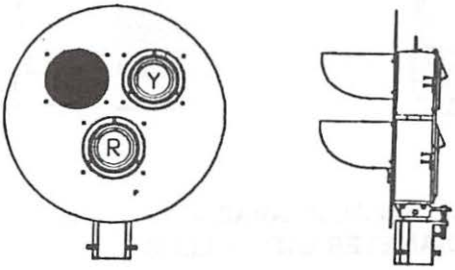
THREE POSITION COLORLIGHT SIGNAL HEAD. 5" TOP OF MAST MOUNT, WITH SNOW SHIELD
PART NO. 5D8306

FOUR POSITION COLORLIGHT SIGNAL HEAD. 5" TOP OF MAST MOUNT, WITH SNOW SHIELD.
PART NO. 5D8406

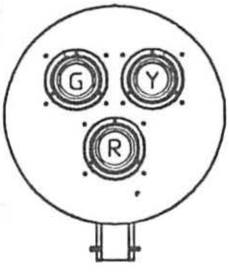


TRIANGULAR

TWO POSITION COLORLIGHT SIGNAL HEAD. 5" TOP OF MAST MOUNTING.
PART NO. 5D4542-X



THREE POSITION COLORLIGHT SIGNAL HEAD. 5" TOP OF MAST MOUNTING.
PART NO. 5D4543-X

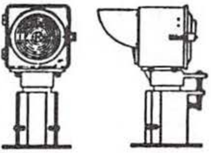


DWARF SIGNALS

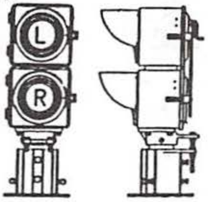
When ordering L & W Dwarf signals please specify the color of the aspects.
These dwarf signals have 6 3/8" aspects and are shipped complete.

ADJUSTABLE TEETER MOUNT

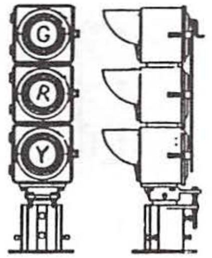
ONE POSITION
NO. 5B4631-1X



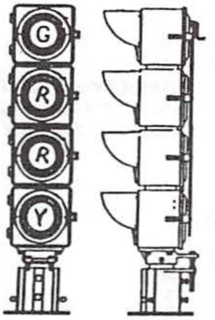
TWO POSITION
NO. 5B4632-1X



THREE POSITION
NO. 5B4633-1X

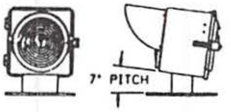


FOUR POSITION
NO. 5B4634-1X

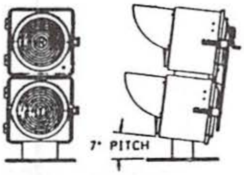


FIXED RIGID 7 DEGREE TILT

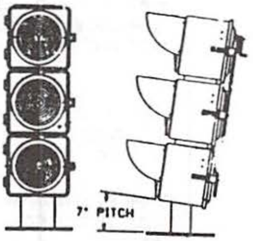
ONE POSITION
NO. 5B4631-X



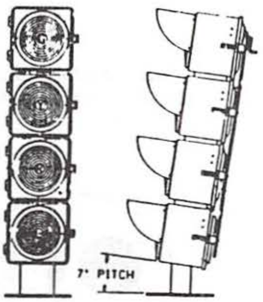
TWO POSITION
NO. 5B4632-X



THREE POSITION
NO. 4633-X



FOUR POSITION
NO. 5B4634-X

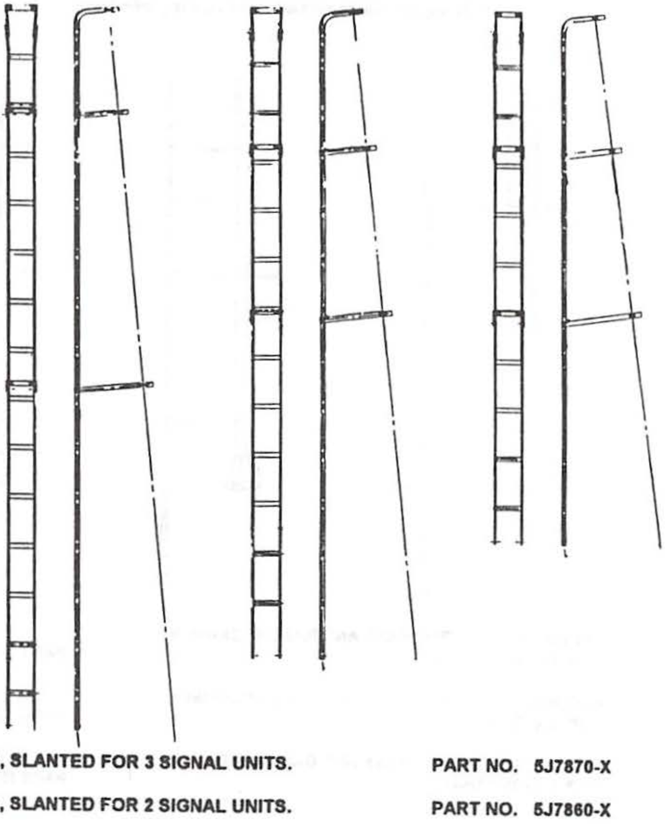


DWARF SIGNALS ALSO AVAILABLE WITH
8-3/8" DIAMETER OUTER LENSE.

MASTS, LADDERS AND BASES

WAYSIDE SIGNAL LADDER ASSEMBLIES
WITH OUT PLATFORMS

The ladder assemblies shown below mount to a 5" signal pole with a 7 degree slant.

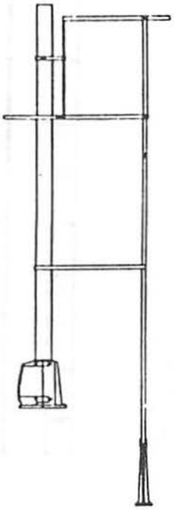


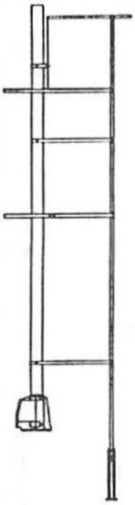
LADDER, SLANTED FOR 3 SIGNAL UNITS.	PART NO. 5J7870-X
LADDER, SLANTED FOR 2 SIGNAL UNITS.	PART NO. 5J7860-X
LADDER, SLANTED FOR 1 SIGNAL UNIT.	PART NO. 5J7850-X

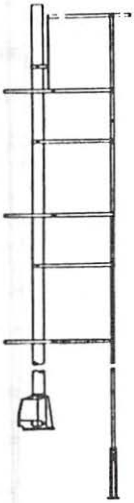
MASTS, LADDERS AND BASES

WAYSIDE SIGNAL LADDER ASSEMBLIES WITH PLATFORMS

The ladder,platform.mast and base assemblies shown below include a front platform. With multiples of standards on centerlines of light aspects, we recommend that you contact our sales office for proper ordering references that will meet your requirements.





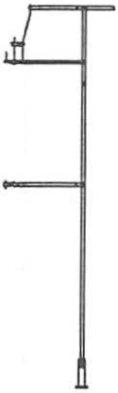


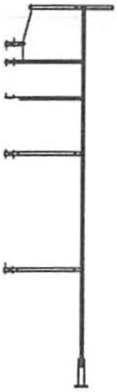
LADDER, PLATFORM, MAST AND BASE ASSEMBLY FOR 3 LIGHT UNITS.	**PART NO. 5G7403-X**
LADDER, PLATFORM, MAST AND BASE ASSEMBLY FOR 2 LIGHT UNITS.	**PART NO. 5G7402-X**
LADDER, PLATFORM, MAST AND BASE ASSEMBLY FOR 1 LIGHT UNIT.	**PART NO. 5G7401-X**

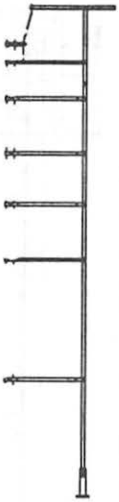
MASTS, LADDERS AND BASES

WAYSIDE SIGNAL LADDER AND PLATFORM REPLACEMENT ASSEMBLIES

The ladder, and platform assemblies shown below include a front platform, and all required field mounting hardware. These assemblies do not include Signal base, Mast, or Ladder foundation.







LADDER AND PLATFORM ASSEMBLY FOR 3 LIGHT UNITS.	**PART NO. 5J7463-X**
LADDER AND PLATFORM ASSEMBLY FOR 2 LIGHT UNITS.	**PART NO. 5J7462-X**
LADDER AND PLATFORM ASSEMBLY FOR 1 LIGHT UNIT.	**PART NO. 5J7461-X**

NEW SAFETY
PLATFORM & LADDER

L & W INDUSTRIES

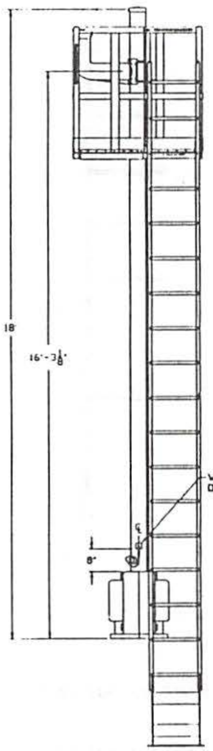
REDUCES INSTALLATION
TIME

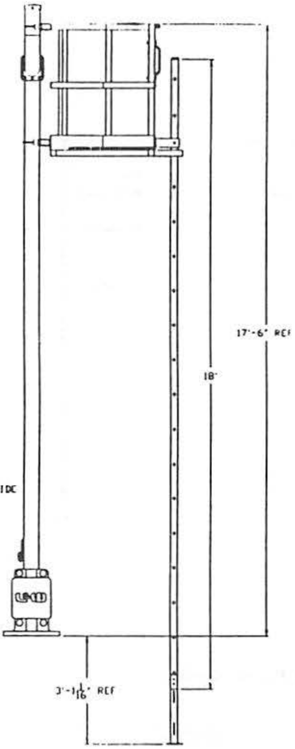
MASTS, LADDERS AND BASES

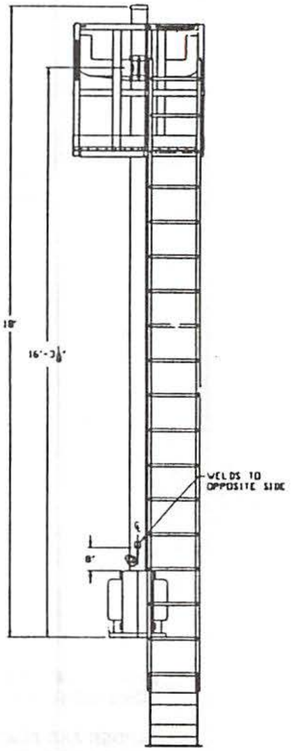
WAYSIDE SIGNAL ALL ALUMINUM LADDER AND PLATFORM ASSEMBLIES

The all aluminum Mast, Ladder, Platform, and Base assemblies shown below include pinnacle, signal mounting brackets, ladder, platforms, 5" mast, ground weld, 5" double junction box base, and ladder foundation. Variation of the detailed assemblies are available by contacting our sales office.

SINGLE PLATFORM ASSEMBLIES:


18'
16'-3 1/8"
WELDS TO OPPOSITE SIDE
℄
8"


17'-6" REF
18"
3'-1 1/16" REF


18'
16'-3 1/8"
WELDS TO OPPOSITE SIDE
℄
8"

SINGLE PLATFORM ASSEMBLY
WITH ONE SIGNAL MOUNT.
PART NO. 5G7504-X

SINGLE PLATFORM ASSEMBLY
WITH TWO SIGNAL MOUNTS.
PART NO. 5G7501-X

PLATFORM IS ALL ONE PIECE
NO ASSEMBLY
MORE WORK SPACE

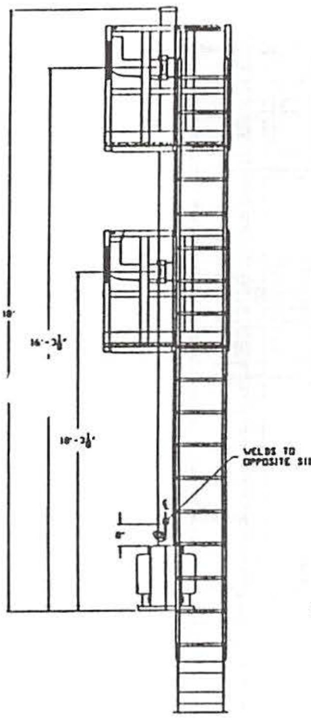
ONE PIECE LADDER
WITH WIDER GROOVED RUNGS

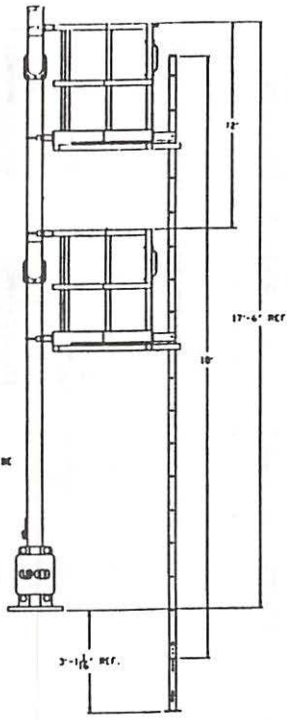
MASTS, LADDERS AND BASES

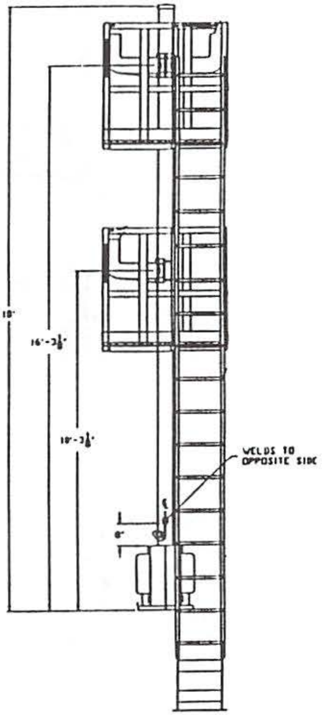
WAYSIDE SIGNAL ALL ALUMINUM LADDER AND PLATFORM ASSEMBLIES

The all aluminum Mast, Ladder, Platform, and Base assemblies shown below include pinnacle, signal mounting brackets, ladder, platforms, 5" mast, ground weld, 5" double junction box base, and ladder foundation. Variation of the detailed assemblies are available by contacting our sales office.

DOUBLE PLATFORM ASSEMBLIES


18'
16'-3⅛"
10'-3⅛"
WELDS TO OPPOSITE SIDE
8"


12"
17'-6" REF.
10'
3'-1⁵⁄₁₆" REF.


18'
16'-3⅛"
10'-3⅛"
WELDS TO OPPOSITE SIDE
8"

DOUBLE PLATFORM ASSEMBLY
WITH TWO SIGNAL MOUNT.
PART NO. 5G7502-X

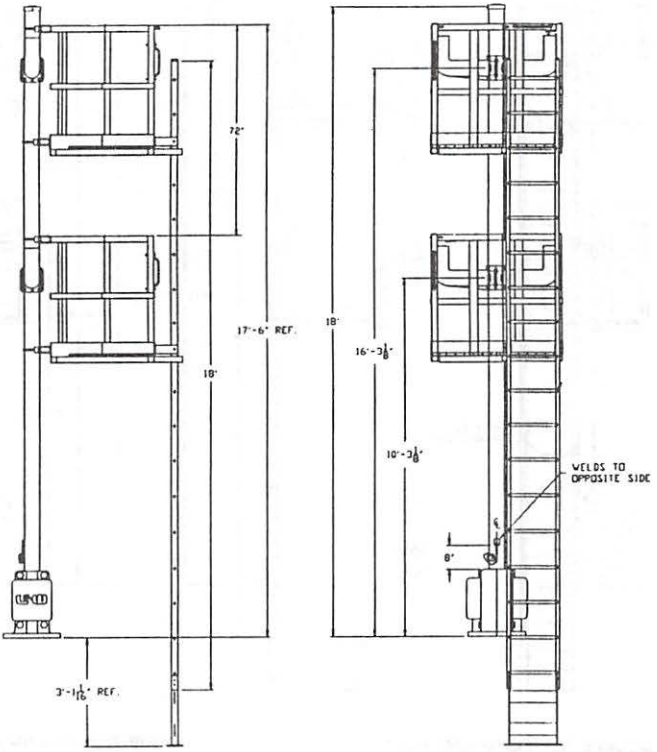
DOUBLE PLATFORM ASSEMBLY
WITH THREE SIGNAL MOUNTS.
PART NO. 5G7505-X

MASTS, LADDERS AND BASES

WAYSIDE SIGNAL ALL ALUMINUM LADDER AND PLATFORM ASSEMBLIES

The all aluminum Mast, Ladder, Platform, and Base assemblies shown below include pinnacle, signal mounting brackets, ladder, platforms, 5" mast, ground weld, 5" double junction box base, and ladder foundation. Variation of the detailed assemblies are available by contacting our sales office.

DOUBLE PLATFORM ASSEMBLIES:


72"
17'-6" REF.
18'
18'
16'-3 1/8"
10'-3 1/8"
WELDS TO OPPOSITE SIDE
8"
3'-1 1/16" REF.

DOUBLE PLATFORM ASSEMBLY
WITH FOUR SIGNAL MOUNTS.
PART NO. 5G7507-X

L & W INDUSTRIES

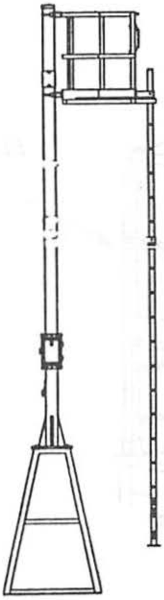
MASTS, LADDERS AND BASES

WAYSIDE SIGNAL ALL ALUMINUM LADDER AND PLATFORM ASSEMBLIES

NEW SAFETY PLATFORM & LADDER

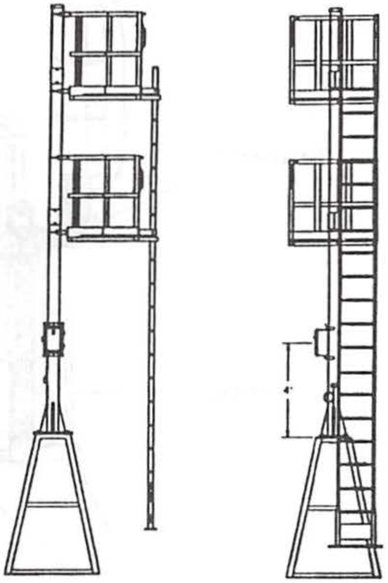
The all aluminum Mast, Ladder, Platform, and Fabricated base assemblies shown below include pinnacle, signal mounting brackets, ladder, platforms, 5" mast, ground weld, Pole mounted junction box 48" high, Fabricated / welded base, ladder foundation, and Signal foundation. Variation of the detailed assemblies are available by contacting our sales office.

SINGLE PLATFORM ASSEMBLIES:



SINGLE PLATFORM ASSEMBLY
WITH BACK TO BACK DRILLING
FOR FOUR SIGNAL MOUNTS
PART NO. 5G7604

DOUBLE PLATFORM ASSEMBLIES:



DOUBLE PLATFORM ASSEMBLY
WITH BACK TO BACK DRILLING
FOR TWO SIGNAL MOUNTS.
PART NO. 5G7605-X

**FABRICATED BASE DESIGN
WITH MAST MOUNTED
TERMINATION BOX**

REDUCES INSTALLATION TIME

**PLATFORM IS ALL ONE PIECE
NO ASSEMBLY
MORE WORK SPACE**

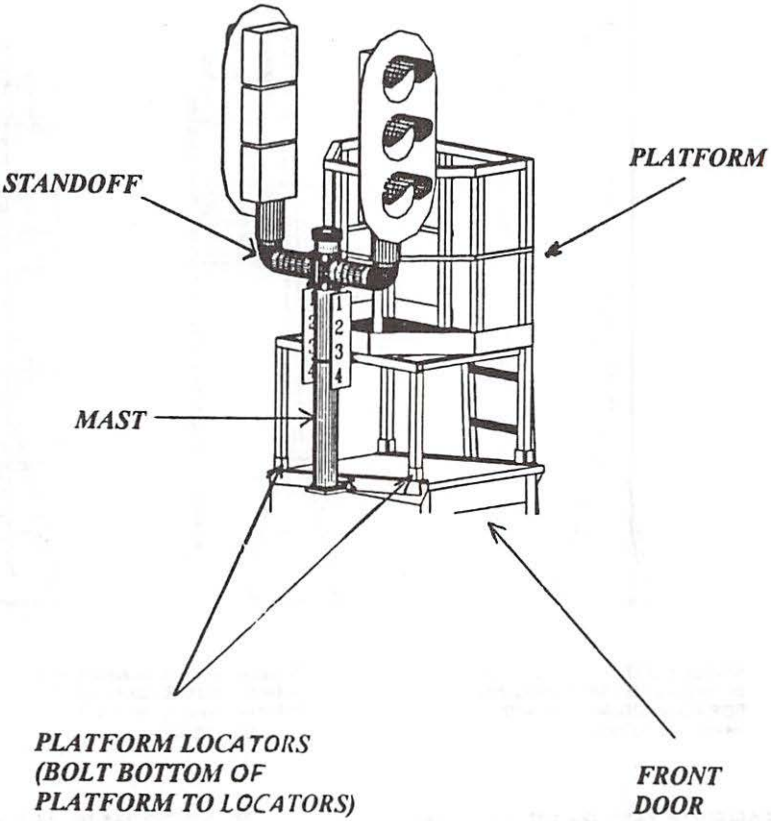
**ONE PIECE LADDER
WITH WIDER GROOVED RUNGS**

SIGNAL HOUSES

FOR TOP MOUNTED WAYSIDE SIGNALS

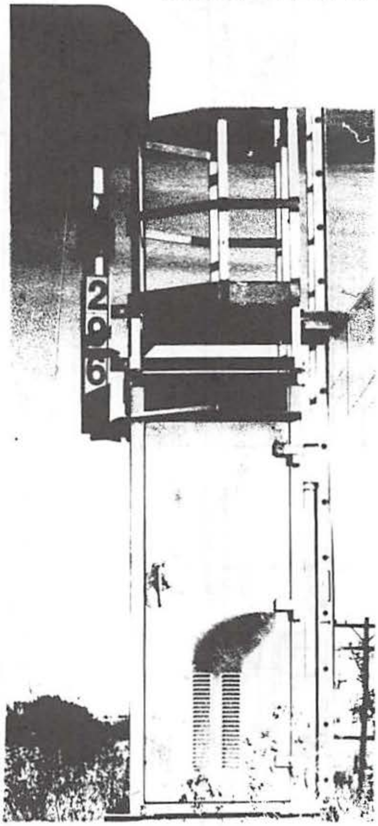
Signal houses designed for Wayside Signal top mounting, are currently available with one or two platforms. The signals can be provided back to back or one way. The assemblies shown below detail the common standards available. These assemblies can be customized to meet your specifications. Please contact our sales office for assistance on ordering your Signal Houses for top mounted Wayside Signals.

SINGLE PLATFORM DESIGN


PLATFORM
STANDOFF
1
2
3
4
MAST
PLATFORM LOCATORS (BOLT BOTTOM OF PLATFORM TO LOCATORS)
FRONT DOOR

SIGNAL HOUSES
FOR TOP MOUNTED WAYSIDE SIGNALS

SINGLE PLATFORM DESIGN



REDUCES INSTALLATION TIME

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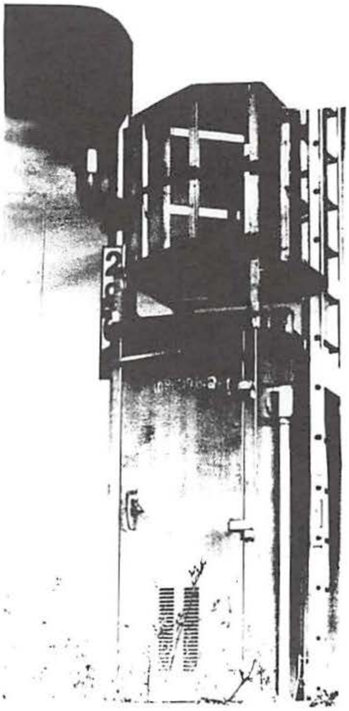

NEW SAFETY PLATFORM & LADDER

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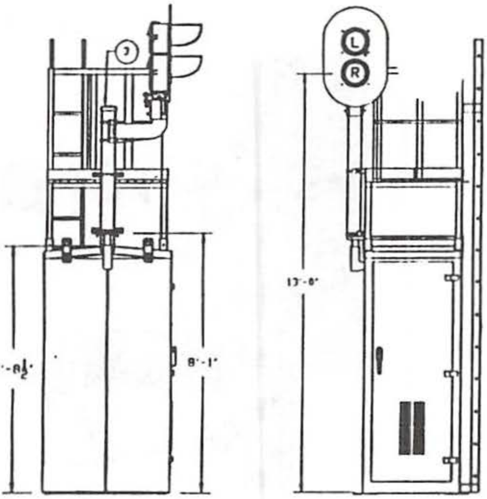
SIGNAL HOUSES

FOR TOP MOUNTED WAYSIDE SIGNALS

SINGLE PLATFORM ASSEMBLIES:

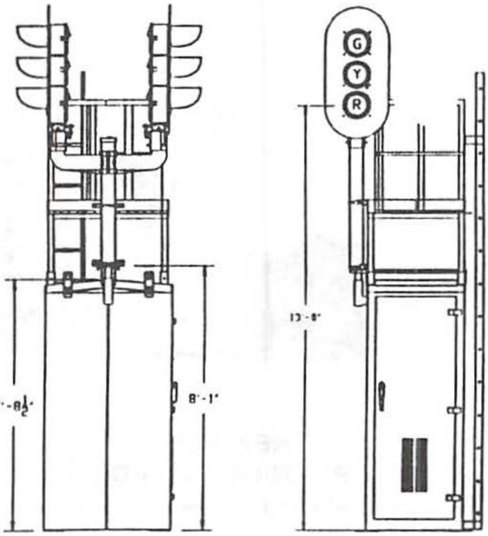
SINGLE PLATFORM SIGNAL HOUSE. WITH ONE WAY (2) POSITION COLORLIGHT. MOUNTED ON A 3' X 4' ALUMINUM INSTRUMENT HOUSE.

RIGHT HAND WAYSIDE APPLICATION
PART NO. 1B30418A133



SINGLE PLATFORM SIGNAL HOUSE WITH TWO WAY (3) POSITION COLORLIGHTS. MOUNTED ON 3' X 4' ALUMINUM INSTRUMENT HOUSE.

RIGHT HAND WAYSIDE APPLICATION
PART NO. 1B30404A133

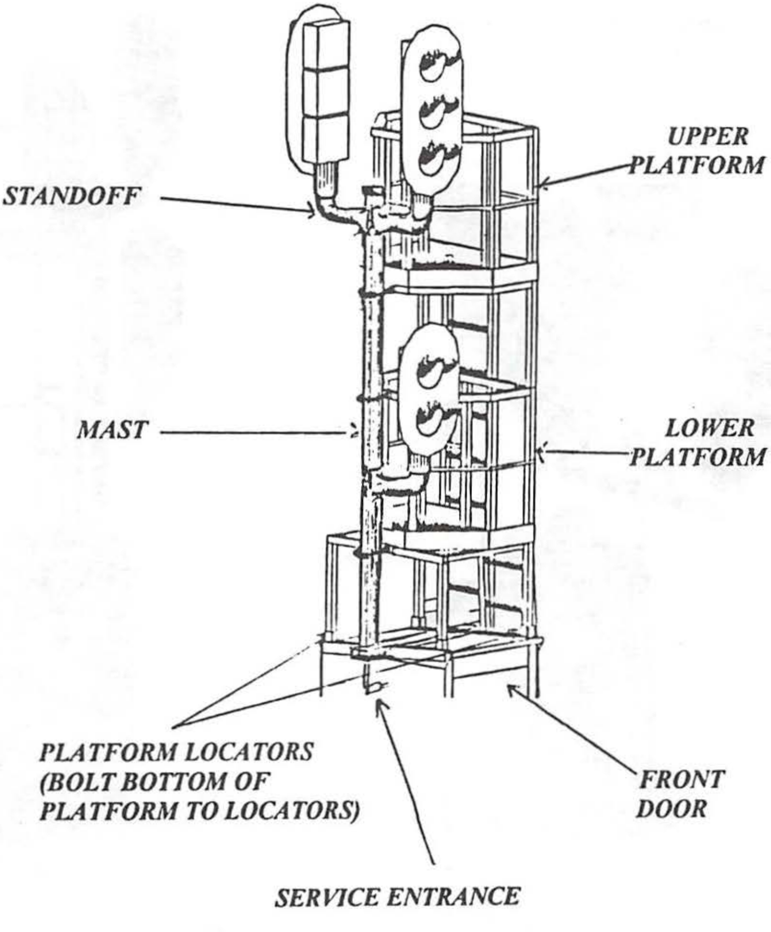


SIGNAL HOUSES

FOR TOP MOUNTED WAYSIDE SIGNALS

Signal houses designed for Wayside Signal top mounting, are currently available with one or two platforms. The signals can be provided back to back or one way. The assemblies shown below detail the common standards available. These assemblies can be customized to meet your specifications. Please contact our sales office for assistance on ordering your Signal Houses for top mounted Wayside Signals.

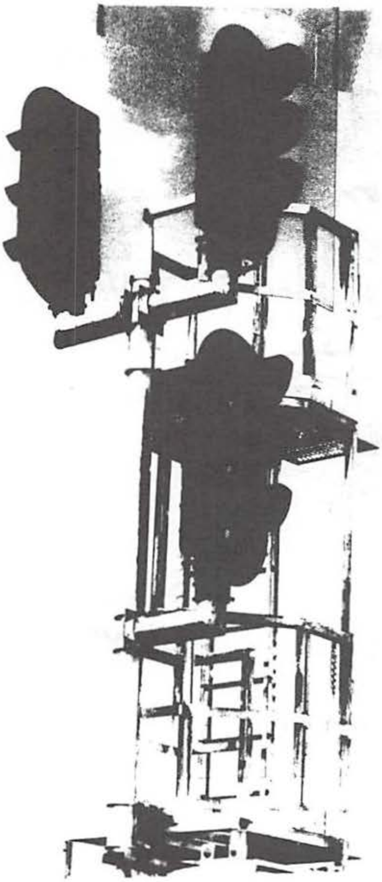
DOUBLE PLATFORM DESIGN

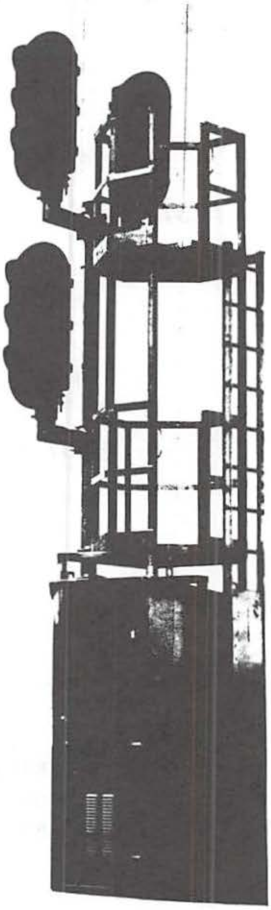

UPPER PLATFORM
STANDOFF
MAST
LOWER PLATFORM
PLATFORM LOCATORS (BOLT BOTTOM OF PLATFORM TO LOCATORS)
FRONT DOOR
SERVICE ENTRANCE

SIGNAL HOUSES
FOR TOP MOUNTED WAYSIDE SIGNALS

DOUBLE PLATFORM DESIGN

EASY ACCESS TO TOP SIGNALS



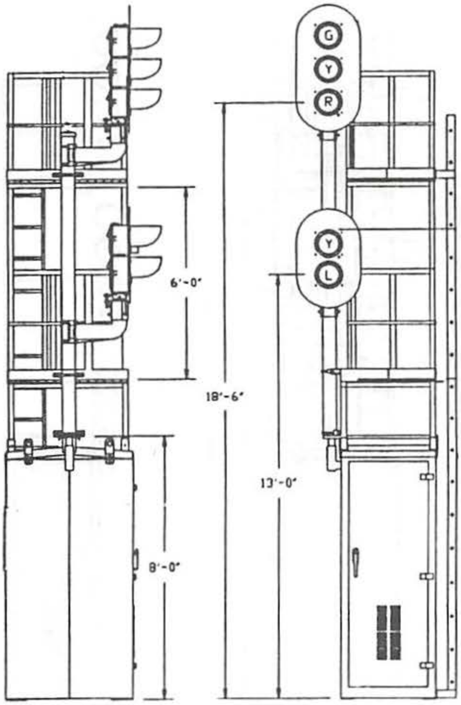


MODULAR PLATFORMS ALLOWS YOU TO CONVERT FROM SINGLE TO DOUBLE

L & W INDUSTRIES

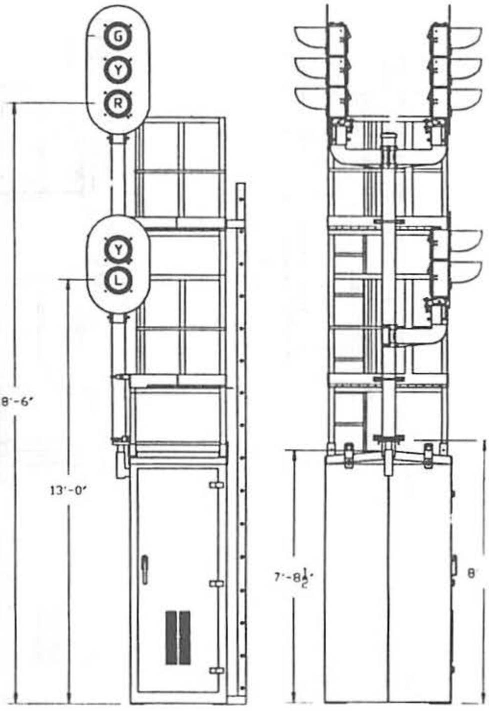
SIGNAL HOUSES
FOR TOP MOUNTED WAYSIDE SIGNALS

DOUBLE PLATFORM ASSEMBLIES:



DOUBLE PLATFORM SIGNAL HOUSE WITH ONE WAY SIGNAL MOUNTING (3) POSITION, OVER (2) POSITION COLORLIGHTS. MOUNTED ON 3' X 4' ALUMINUM INSTRUMENT HOUSE.

RIGHT HAND WAYSIDE APPLICATION
PART NO.



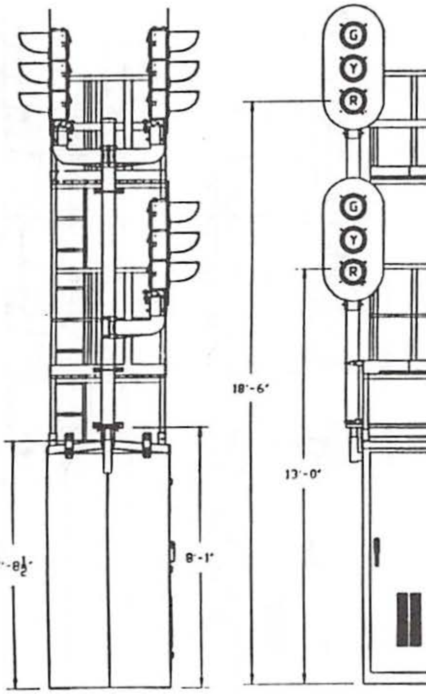
DOUBLE PLATFORM SIGNAL HOUSE WITH BACK TO BACK (3) POSITION OVER (2) POSITION COLORLIGHTS. MOUNTED ON 3' X 4' ALUMINUM INSTRUMENT HOUSE.

RIGHT HAND WAYSIDE APPLICATION
PART NO. 1B30406A133

SIGNAL HOUSES

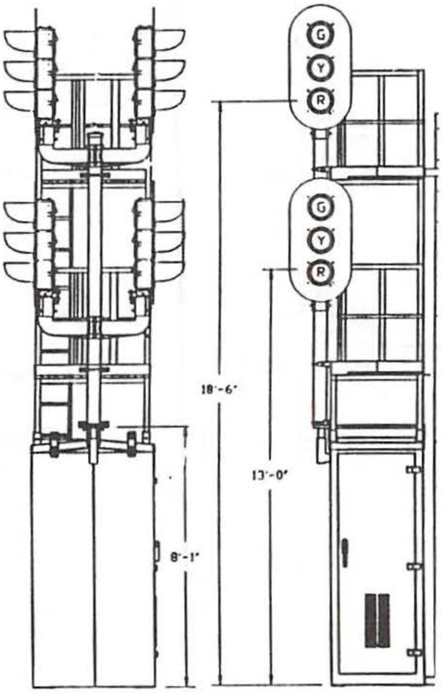
FOR TOP MOUNTED WAYSIDE SIGNALS

DOUBLE PLATFORM ASSEMBLIES:



DOUBLE PLATFORM SIGNAL HOUSE WITH BACK TO BACK (3) POSITION OVER (3) POSITION COLORLIGHTS. MOUNTED ON 3' X 4' ALUMINUM INSTRUMENT HOUSE.

RIGHT HAND WAYSIDE APPLICATION
PART NO.



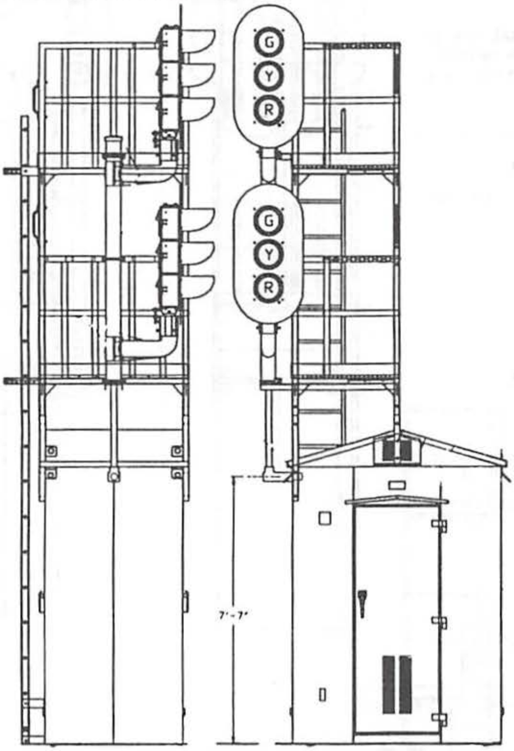
DOUBLE PLATFORM SIGNAL HOUSE WITH BACK TO BACK (3) POSITION OVER BACK TO BACK (3) POSITION COLORLIGHTS. MOUNTED ON 3' X 4' ALUMINUM INSTRUMENT HOUSE.

RIGHT HAND WAYSIDE APPLICATION
PART NO. 1B30406A133

SIGNAL HOUSES

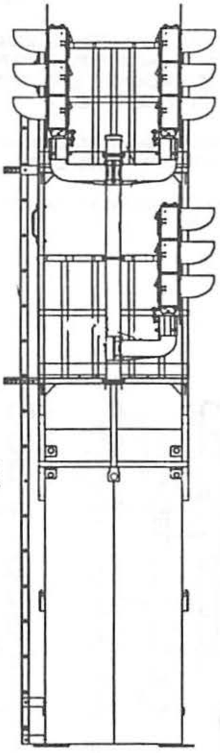
FOR TOP MOUNTED WAYSIDE SIGNALS

DOUBLE PLATFORM ASSEMBLIES:



DOUBLE PLATFORM SIGNAL HOUSE WITH (3) POSITION OVER (3) POSITION COLORLIGHTS. MOUNTED ON 4' X 6' ALUMINUM INSTRUMENT HOUSE.

RIGHT HAND WAYSIDE APPLICATION
PART NO. 1B40604A53



DOUBLE PLATFORM SIGNAL HOUSE WITH BACK TO BACK (3) POSITION OVER (3) POSITION COLORLIGHTS. MOUNTED ON 4' X 6' ALUMINUM INSTRUMENT HOUSE.

RIGHT HAND WAYSIDE APPLICATION
PART NO. 1B40601A53

SIGNAL HOUSES

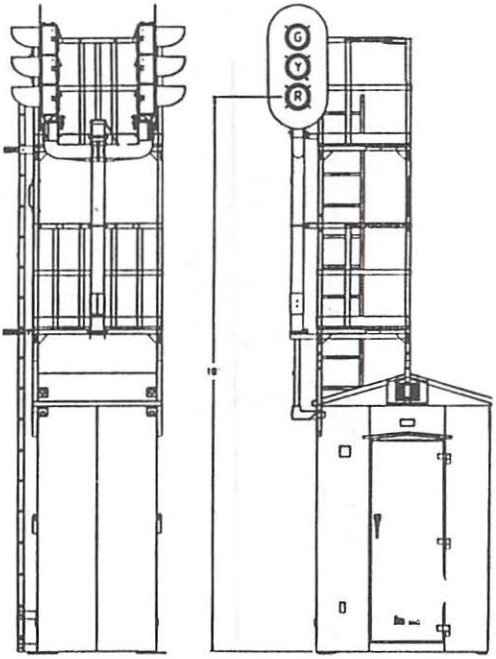
FOR TOP MOUNTED WAYSIDE SIGNALS

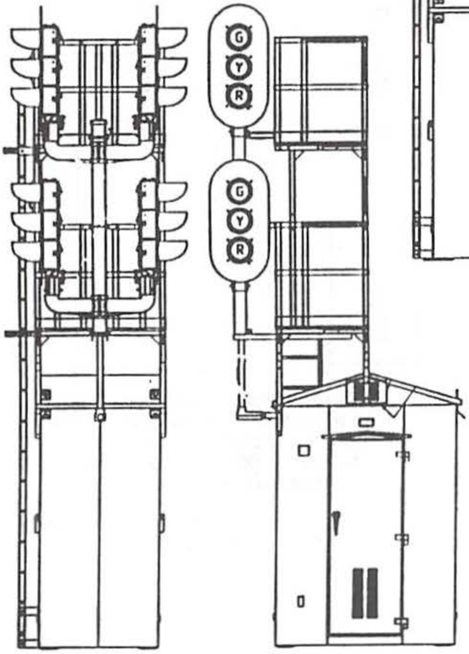
DOUBLE PLATFORM ASSEMBLIES:

DOUBLE PLATFORM SIGNAL HOUSE WITH BACK TO BACK (3) POSITION COLORLIGHTS. MOUNTED ON 4' X 6' INSTRUMENT HOUSE.

RIGHT HAND WAYSIDE APPLICATION PART NO. 1B40602A53

LEFT HAND WAYSIDE APPLICATION PART NO.





DOUBLE PLATFORM SIGNAL HOUSE WITH BACK TO BACK (3) POSITION OVER BACK TO BACK (3) POSITION COLORLIGHTS. MOUNTED ON 4' X 6' ALUMINUM INSTRUMENT HOUSE.

RIGHT HAND WAYSIDE APPLICATION PART NO. 1B40603A53

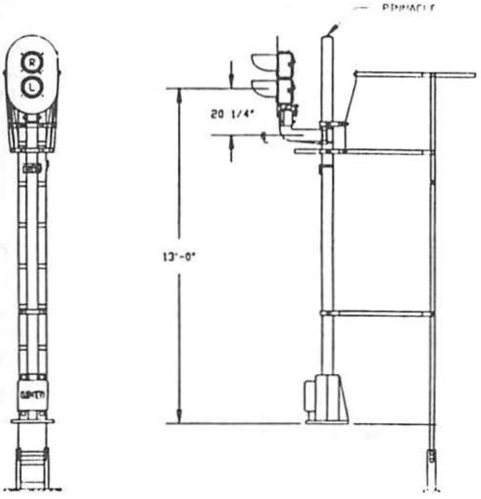
L & W INDUSTRIES

COLORLIGHT SIGNAL ASSEMBLIES
WITH GALVANIZED STEEL LADDER, AND PLATFORMS

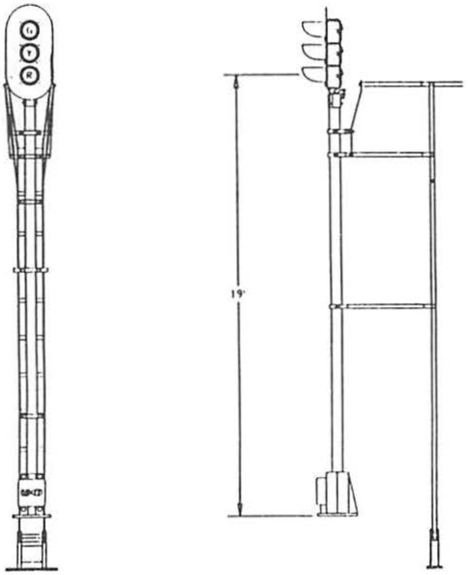
The Colorlight Signal assemblies shown in this section are examples of just some of the many Colorlight Signal assemblies available from L & W Industries. Please contact our sales office to determine the ordering reference which will meet with your requirements.

SINGLE PLATFORM ASSEMBLIES:

SINGLE PLATFORM SIGNAL ASSEMBLY WITH (2) POSITION COLORLIGHT.
PART NO. 5A4610-22X



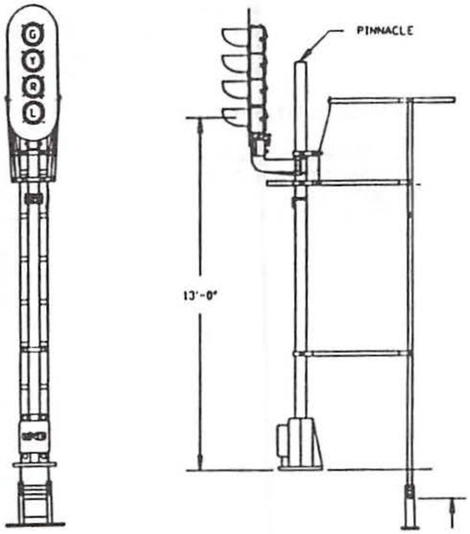
SINGLE PLATFORM SIGNAL ASSEMBLY WITH (3) POSITION COLORLIGHT.
PART NO. 5A4610-24X



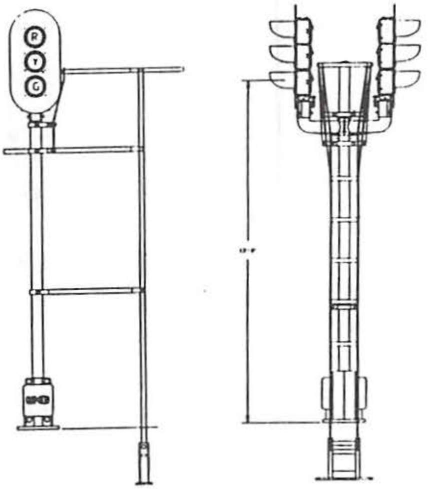
COLORLIGHT SIGNAL ASSEMBLIES
WITH GALVANIZED STEEL LADDER, AND PLATFORMS

SINGLE PLATFORM ASSEMBLIES (CONT.):

SINGLE PLATFORM SIGNAL
ASSEMBLY WITH (4) POSITION
COLORLIGHT.
PART NO. 5A4610-21X



SINGLE PLATFORM SIGNAL
ASSEMBLY WITH (3) POSITION
BACK TO BACK COLORLIGHT.
PART NO. 5A4610-70X

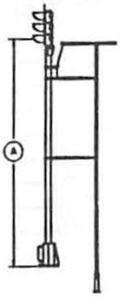


COLORLIGHT SIGNAL ASSEMBLIES

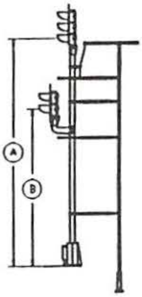
ORDERING REFERENCE SHEET FOR WAYSIDE SIGNALS

The below signal arrangements are provided to help in assisting you to determine the signal assembly which meets your requirements. These are just for reference, you will need to specify the following:

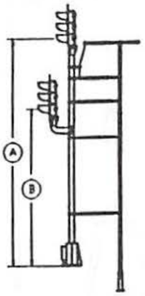
(1) Single or double junction box base.
(2) Fabricated / welded base with pole mounted junction box.
(3) Steel or all aluminum ladders and platforms.
(4) Dimensions (A), (B), and (C) as required.



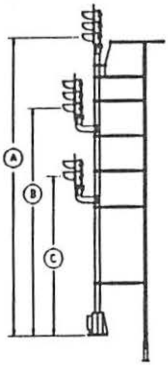
REF A



REF. B



REF. C



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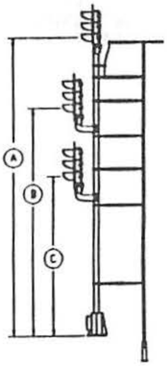

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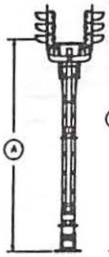

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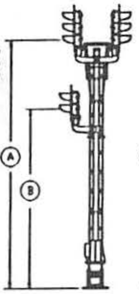

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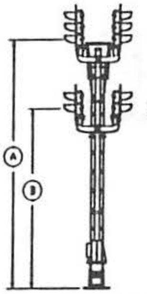

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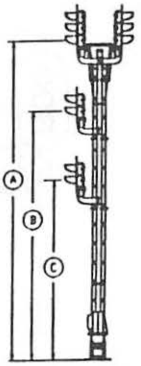

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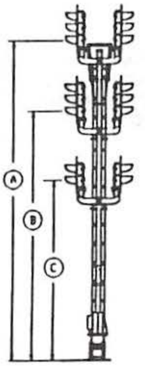

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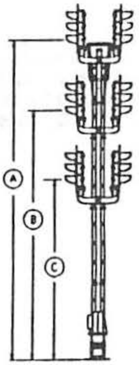
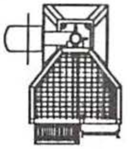


REF. K

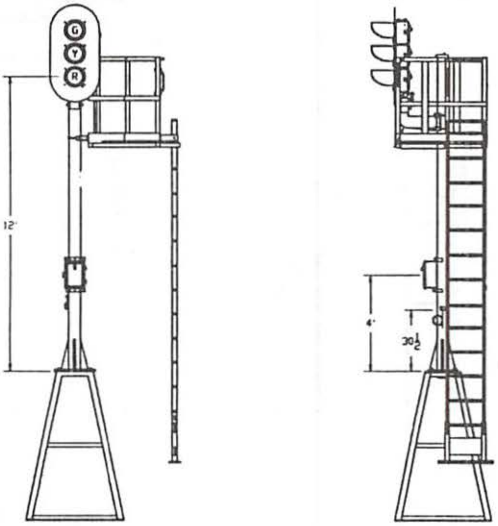
COLORLIGHT SIGNAL ASSEMBLIES
WITH ALL ALUMINUM LADDER, AND PLATFORMS AND WITH FABRICATED / WELDED BASES.



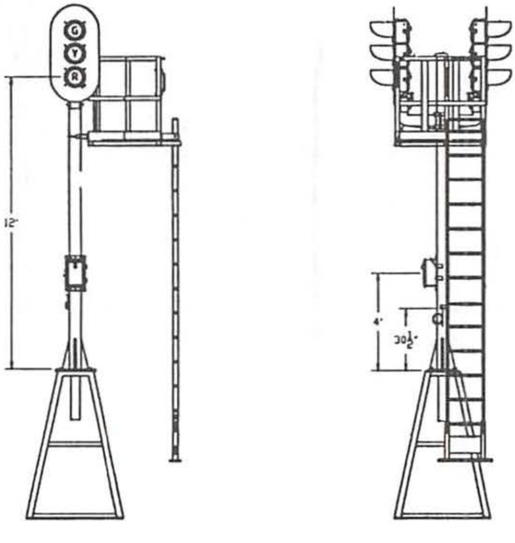
The Colorlight Signal assemblies shown in this section are examples of just some of the many Colorlight Signal assemblies available from L & W Industries. Please contact our sales office to determine the ordering reference which will meet with your requirements.

SINGLE PLATFORM ASSEMBLIES:

SINGLE PLATFORM SIGNAL ASSEMBLY WITH (3) POSITION COLORLIGHT.
PART NO. 5A4620-1X



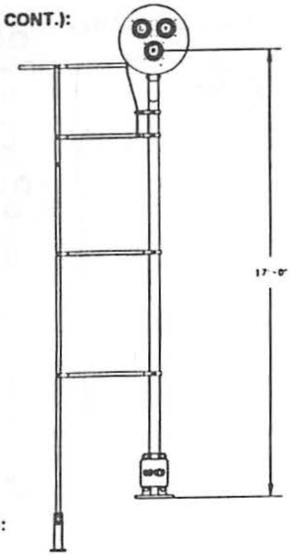
SINGLE PLATFORM SIGNAL ASSEMBLY WITH (3) POSITION BACK TO BACK COLORLIGHT.
PART NO. 5A4620-2X

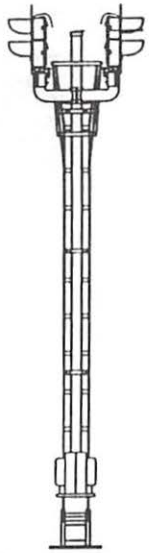


COLORLIGHT SIGNAL ASSEMBLIES
WITH GALVANIZED STEEL LADDER, AND PLATFORMS

SINGLE PLATFORM ASSEMBLIES (CONT.):

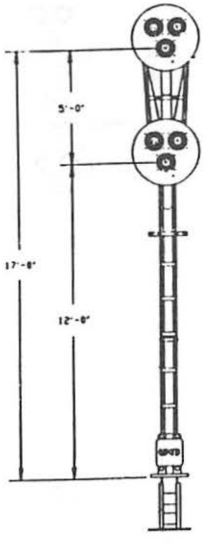
SINGLE PLATFORM SIGNAL ASSEMBLY WITH (3) POSITION BACK TO BACK TRIANGULAR COLORLIGHT.
PART NO. 5A4610-55X

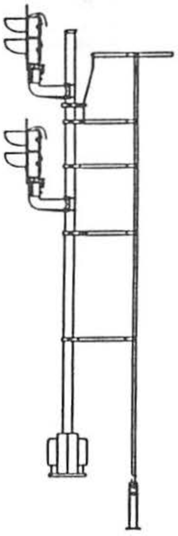




DOUBLE PLATFORM ASSEMBLIES:

DOUBLE PLATFORM SIGNAL ASSEMBLY WITH (3) POSITION OVER (3) POSITION COLORLIGHT.
PART NO. 5A4610-56X



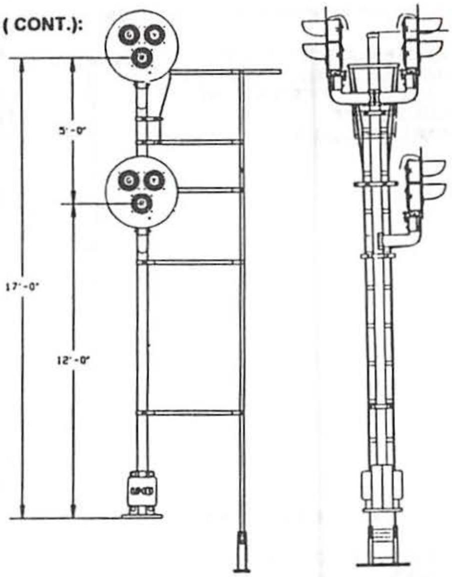


COLORLIGHT SIGNAL ASSEMBLIES

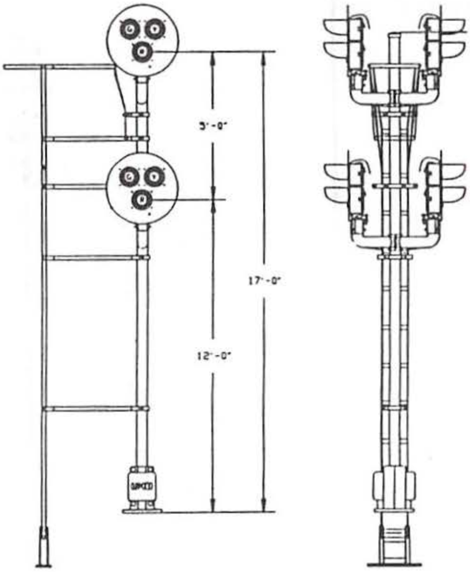
WITH GALVANIZED STEEL LADDER, AND PLATFORMS

DOUBLE PLATFORM ASSEMBLIES (CONT.):

DOUBLE PLATFORM SIGNAL ASSEMBLY WITH (3) POSITION BACK TO BACK OVER (3) POSITION TRIANGULAR COLORLIGHT.
PART NO. 5A4610-81X

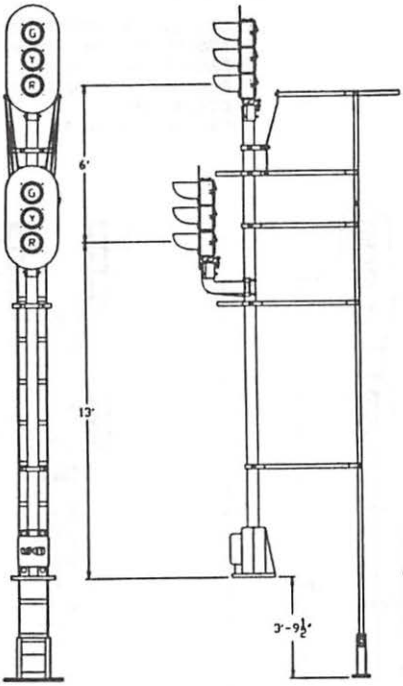


DOUBLE PLATFORM SIGNAL ASSEMBLY WITH (3) POSITION BACK TO BACK OVER (3) POSITION BACK TO BACK COLORLIGHTS.
PART NO. 5A4610-57X

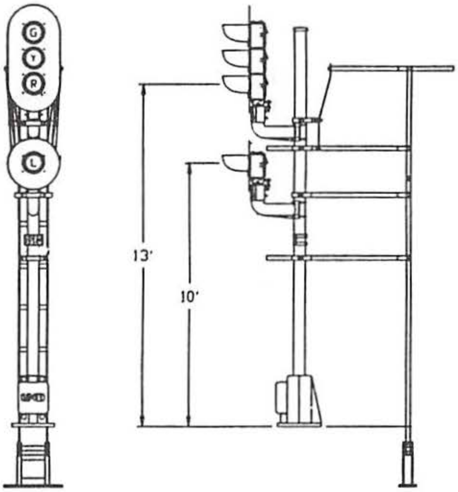


COLORLIGHT SIGNAL ASSEMBLIES
WITH GALVANIZED STEEL LADDER, AND PLATFORMS

DOUBLE PLATFORM ASSEMBLIES (CONT.):



DOUBLE PLATFORM SIGNAL
ASSEMBLY WITH (3) POSITION
OVER (3) POSITION COLORLIGHT.
PART NO. 5A4610-3X



DOUBLE PLATFORM SIGNAL
ASSEMBLY WITH (3) POSITION
OVER (1) POSITION
COLORLIGHTS.
PART NO. 5A4610-87X

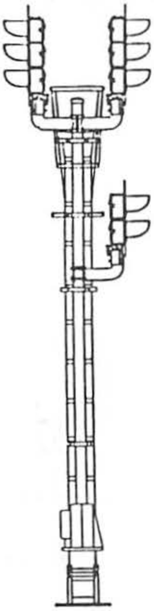
L & W INDUSTRIES

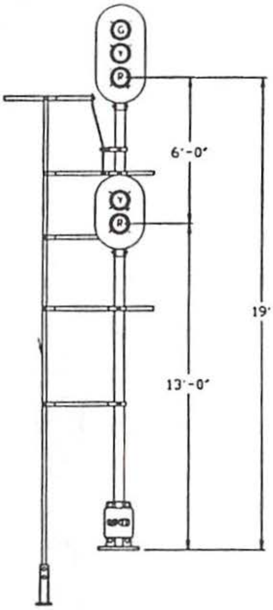
COLORLIGHT SIGNAL ASSEMBLIES
WITH GALVANIZED STEEL LADDER, AND PLATFORMS

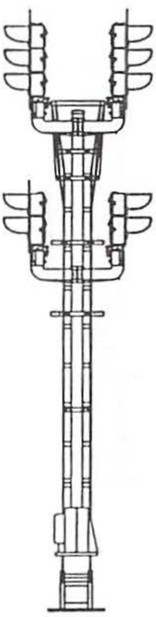
DOUBLE PLATFORM ASSEMBLIES (CONT.):

DOUBLE PLATFORM SIGNAL
ASSEMBLY WITH (3) POSITION
BACK TO BACK OVER (2)
POSITION COLORLIGHT.
PART NO. 5A4610-12X

DOUBLE PLATFORM SIGNAL
ASSEMBLY WITH (3) POSITION
BACK TO BACK OVER (2)
POSITION BACK TO BACK
COLORLIGHTS.
PART NO. 5A4610-87X



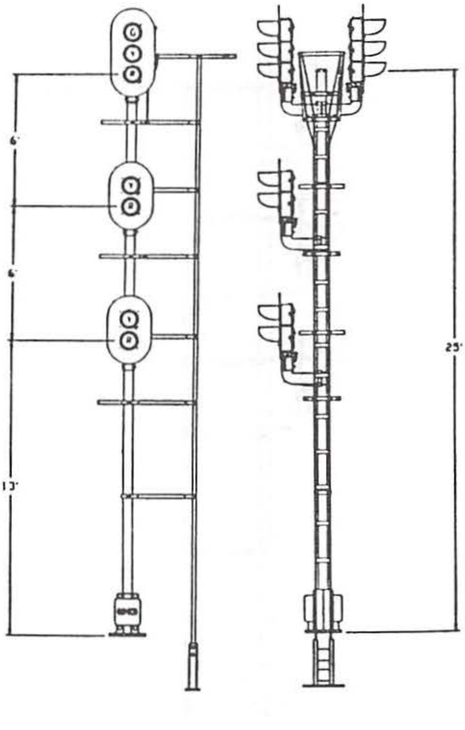




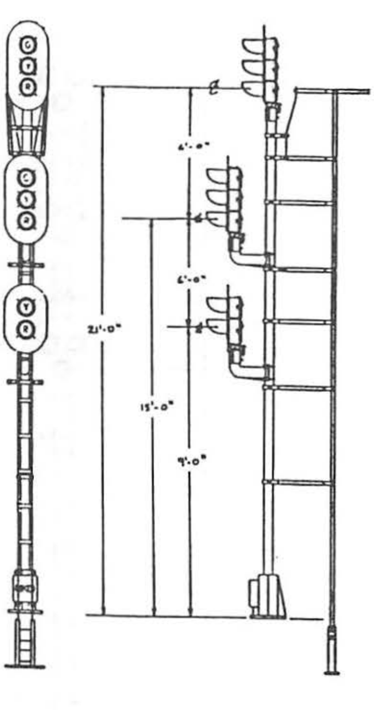
COLORLIGHT SIGNAL ASSEMBLIES
WITH GALVANIZED STEEL LADDER, AND PLATFORMS

TRIPLE PLATFORM ASSEMBLIES (CONT.):

TRIPLE PLATFORM SIGNAL ASSEMBLY WITH (3) POSITION OVER (2) POSITION OVER (2) POSITION COLORLIGHT.
PART NO. 5A4610-76X



TRIPLE PLATFORM SIGNAL ASSEMBLY WITH (3) POSITION OVER (3) POSITION OVER (2) POSITION COLORLIGHTS.
PART NO. 5A4610-63X

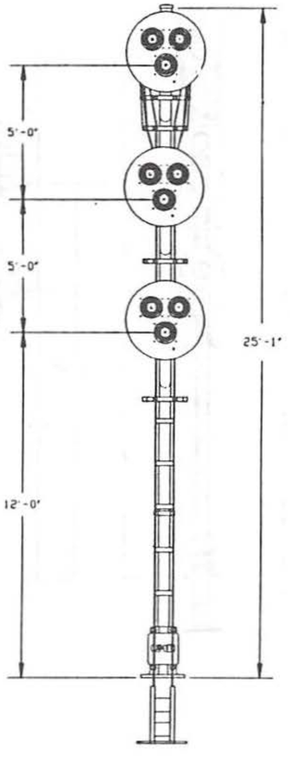


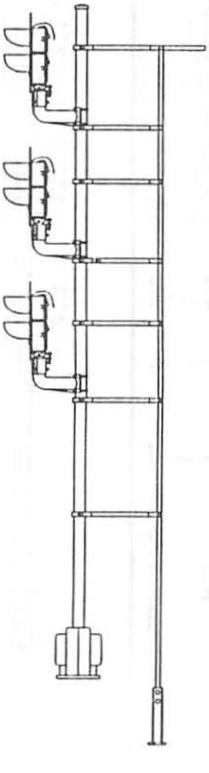
COLORLIGHT SIGNAL ASSEMBLIES

WITH GALVANIZED STEEL LADDER, AND PLATFORMS

TRIPLE PLATFORM ASSEMBLIES (CONT.):

**TRIPLE PLATFORM SIGNAL
ASSEMBLY WITH (3) POSITION
OVER (3) POSITION OVER (3)
POSITION TRIANGULAR
COLORLIGHT.
PART NO. 5A4610-67X**

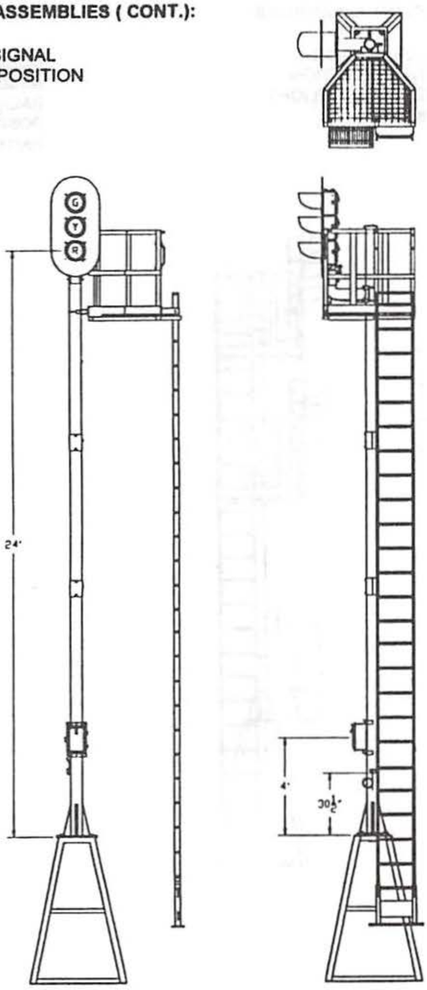




COLORLIGHT SIGNAL ASSEMBLIES
WITH ALL ALUMINUM LADDER, AND PLATFORMS AND WITH FABRICATED / WELDED BASES.

SINGLE PLATFORM ASSEMBLIES (CONT.):

SINGLE PLATFORM SIGNAL ASSEMBLY WITH (3) POSITION COLORLIGHT.
PART NO. 5A4620-8X

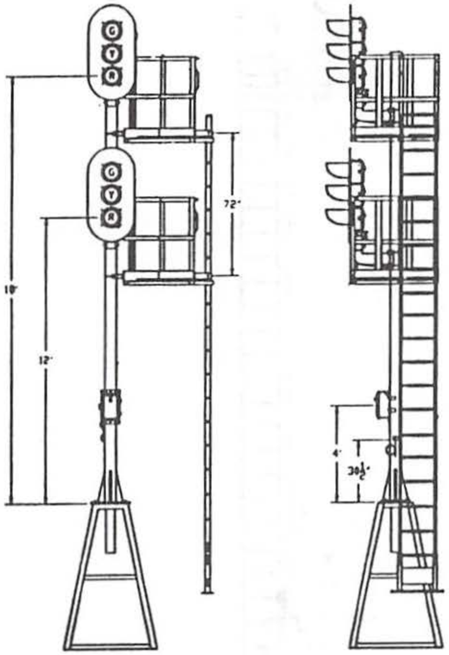


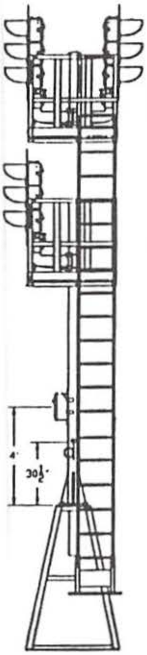
COLORLIGHT SIGNAL ASSEMBLIES
WITH ALL ALUMINUM LADDER, AND PLATFORMS AND WITH FABRICATED / WELDED BASES.

DOUBLE PLATFORM ASSEMBLIES:

DOUBLE PLATFORM SIGNAL
ASSEMBLY WITH (3) POSITION
OVER (3) POSITION COLORLIGHT.
PART NO. 5A4620-3X

DOUBLE PLATFORM SIGNAL
ASSEMBLY WITH (3) POSITION
BACK TO BACK OVER (3)
POSITION COLORLIGHTS.
PART NO. 5A4620-4X

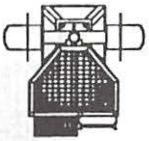


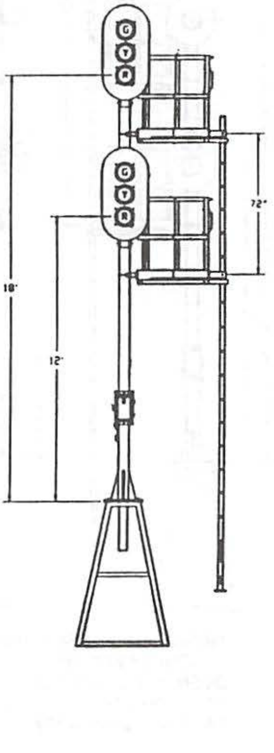


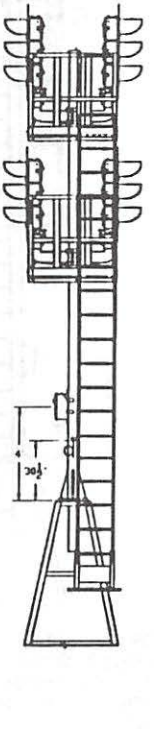
COLORLIGHT SIGNAL ASSEMBLIES
WITH ALL ALUMINUM LADDER, AND PLATFORMS AND WITH FABRICATED / WELDED BASES.

DOUBLE PLATFORM ASSEMBLIES (CONT.):

DOUBLE PLATFORM SIGNAL
ASSEMBLY WITH (3) POSITION
BACK TO BACK OVER (3)
POSITION BACK TO BACK
COLORLIGHT.
PART NO. 5A4620-5X

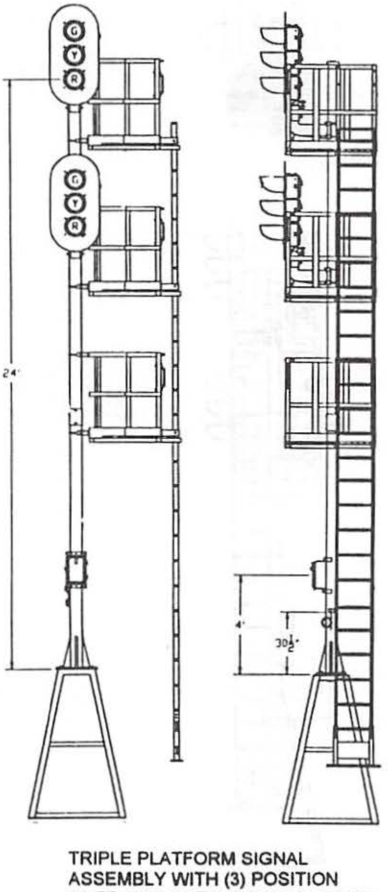




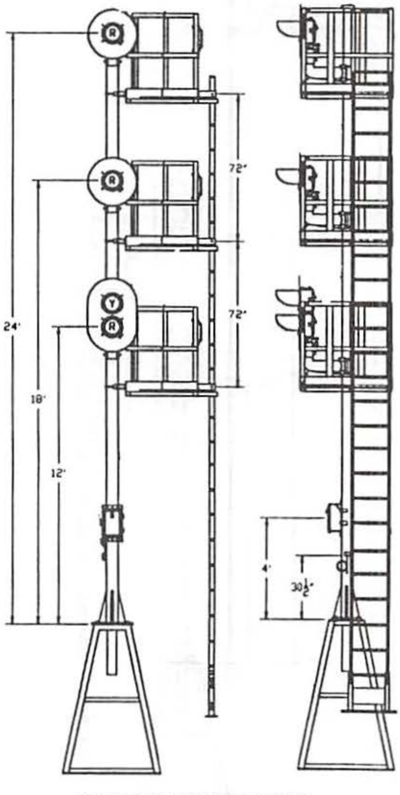


COLORLIGHT SIGNAL ASSEMBLIES
WITH ALL ALUMINUM LADDER, AND PLATFORMS AND WITH FABRICATED / WELDED BASES.

TRIPLE PLATFORM ASSEMBLIES:



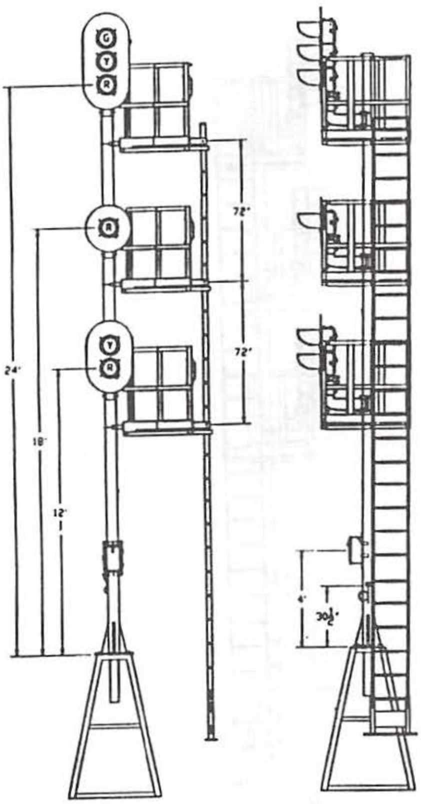
TRIPLE PLATFORM SIGNAL
ASSEMBLY WITH (3) POSITION
OVER (3) POSITION COLORLIGHTS.
WITH EXTRA SIGNAL LOCATION.
PART NO. 5A4620-9X



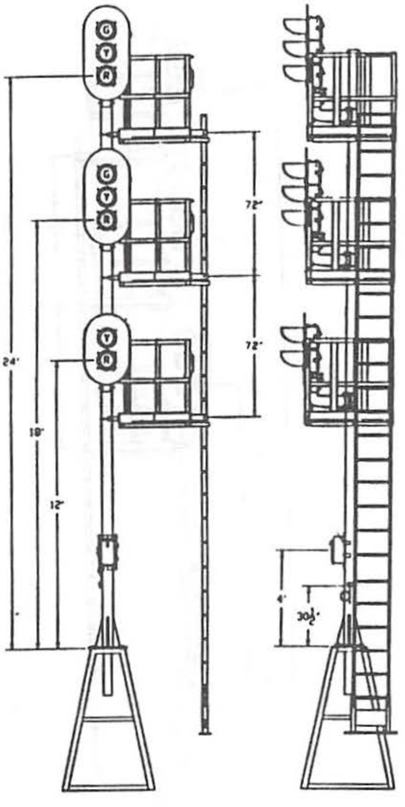
TRIPLE PLATFORM SIGNAL
ASSEMBLY WITH (1) POSITION
OVER (1) POSITION OVER (2)
POSITION COLORLIGHTS.
PART NO. 5A4620-12X

COLORLIGHT SIGNAL ASSEMBLIES
WITH ALL ALUMINUM LADDER, AND PLATFORMS AND WITH FABRICATED / WELDED BASES.

TRIPLE PLATFORM ASSEMBLIES:


G
Y
R
R
Y
R
72"
72"
24'
18'
12'
4'
30½"

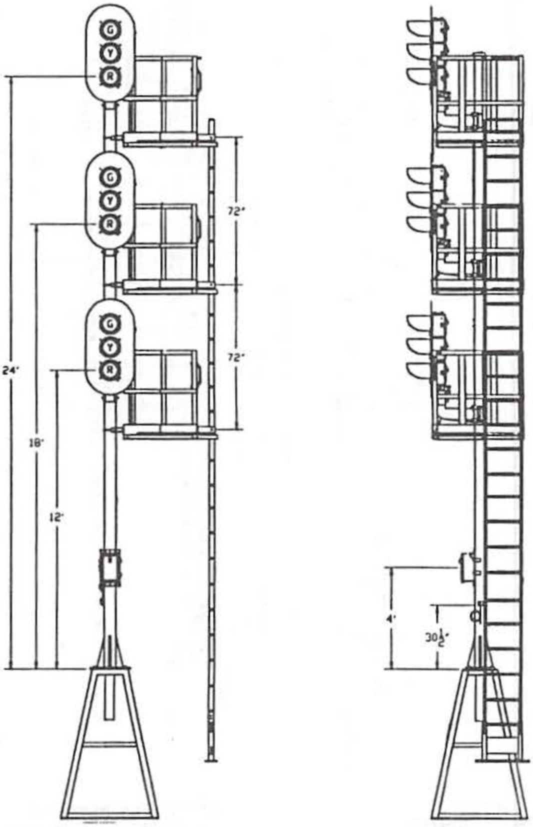
TRIPLE PLATFORM SIGNAL ASSEMBLY WITH (3) POSITION OVER (1) POSITION OVER (2) POSITION COLORLIGHTS.
PART NO. 5A4620-11X


G
Y
R
G
Y
R
Y
R
72"
72"
24'
18'
12'
4'
30½"

TRIPLE PLATFORM SIGNAL ASSEMBLY WITH (3) POSITION OVER (3) POSITION OVER (2) POSITION COLORLIGHTS.
PART NO. 5A4620-10X

COLORLIGHT SIGNAL ASSEMBLIES
WITH ALL ALUMINUM LADDER, AND PLATFORMS AND WITH FABRICATED / WELDED BASES.

TRIPLE PLATFORM ASSEMBLIES:



TRIPLE PLATFORM SIGNAL ASSEMBLY WITH (3) POSITION OVER (3) POSITION OVER (3) POSITION COLORLIGHTS.
PART NO. 5A4620-6X

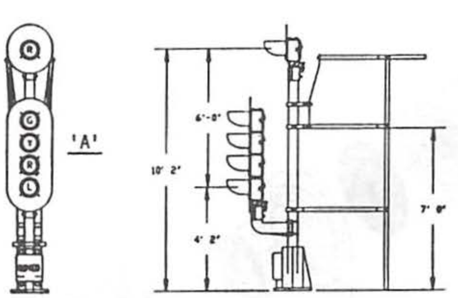
L & W INDUSTRIES

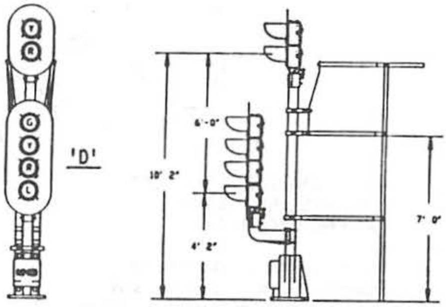
COLORLIGHT SIGNAL ASSEMBLIES

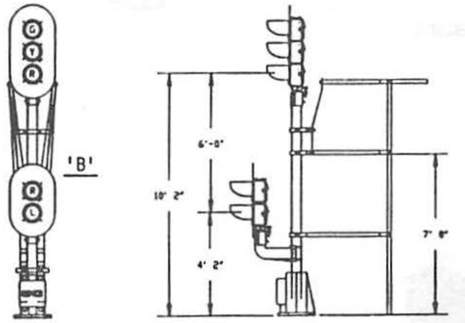
FOR BRIDGE AND CANTILEVER MOUNTING

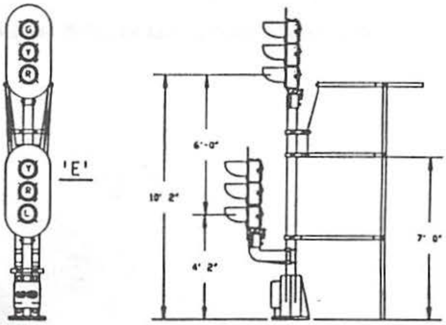
The Colorlight Signal assemblies shown in this section are examples of just some of the many Colorlight Signal assemblies available from L & W Industries. Please contact our sales office to determine the ordering reference which will meet with your requirements.

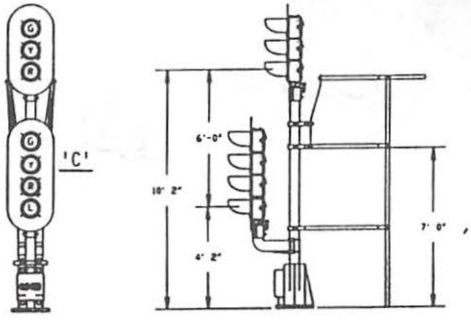
BRIDGE AND CANTILEVER MOUNTED COLORLIGHT SIGNAL ASSEMBLIES:


R
G
Y
R
L
'A'
6'-0"
10' 2"
4' 2"
7' 0"


Y
R
G
Y
R
L
'D'
6'-0"
10' 2"
4' 2"
7' 0"


G
Y
R
R
L
'B'
6'-0"
10' 2"
4' 2"
7' 0"


G
Y
R
Y
R
L
'E'
6'-0"
10' 2"
4' 2"
7' 0"

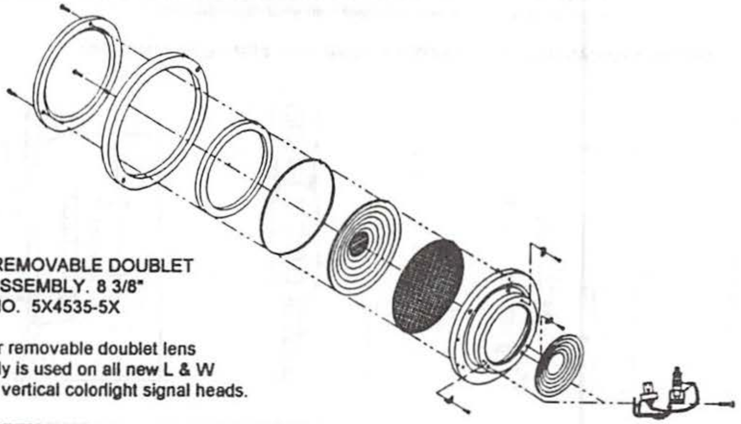

G
Y
R
G
Y
R
L
'C'
6'-0"
10' 2"
4' 2"
7' 0"

REFERENCE	ORDERING NUMBER
'A'	5A4610-50X
'B'	5A4610-49X
'C'	5A4610-45X
'D'	5A4610-47X
'E'	5A4610-48X

DOUBLET LENS ASSEMBLIES

Doublet lens assemblies shown below are factory focused and sealed. Please designate aspect color when ordering doublet lens assembly replacements.

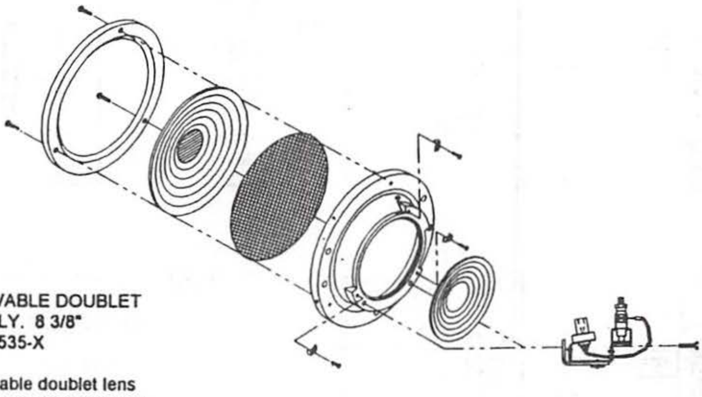
REAR REMOVABLE DOUBLET LENS ASSEMBLIES:



REAR REMOVABLE DOUBLET LENS ASSEMBLY. 8 3/8"
PART NO. 5X4535-5X

The rear removable doublet lens assembly is used on all new L & W stacked vertical colorlight signal heads.

FRONT REMOVABLE DOUBLET LENS ASSEMBLIES:

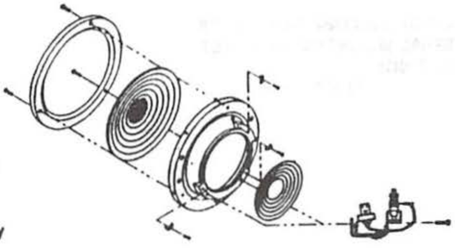


FRONT REMOVABLE DOUBLET LENS ASSEMBLY. 8 3/8"
PART NO. 5Z4535-X

The front removable doublet lens assembly is used on the triangular style colorlight, and all older L & W stacked vertical style colorlight heads.

DOUBLET LENS ASSEMBLIES (CONT.)

DWARF DOUBLET LENS ASSEMBLY:



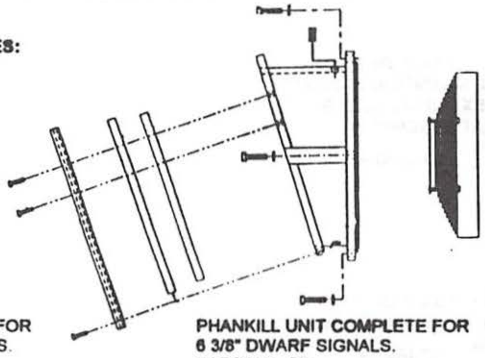
DWARF DOUBLET LENS ASSEMBLY
PART NO. 5Z4637-X

The 6 3/8" Dwarf Double Lens assembly is front removable. This replacement assembly is to be used on all L & W Dwarf signals with 6 3/8" aspect.

PHANKILL ASSEMBLIES

The honeycomb Phankill assemblies shown below are shipped completely assembled and ready to mount on your L & W colorlight signals or dwarf signals, with all mounting hardware provided.

PHANKILL UNIT ASSEMBLIES:



PHANKILL UNIT COMPLETE FOR
8 3/8" COLORLIGHT SIGNALS.
PART NO. 5Z4803-X

The 8 3/8" Phankill unit will assemble to the rear or front removable colorlight doublet lens assembly.

PHANKILL UNIT COMPLETE FOR
6 3/8" DWARF SIGNALS.
PART NO. 5Z

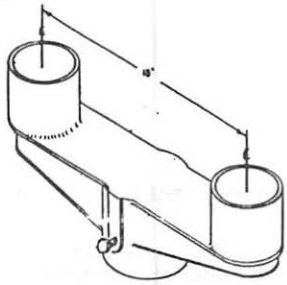
The 6 3/8" Phankill unit will assemble to the doublet lens assembly on all L & W dwarf signals with 6 3/8" lens aspects.

MOUNTING BRACKETS

FOR WAYSIDE SIGNALS WITH 5" MAST MOUNTING

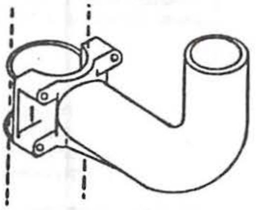
Mounting Brackets shown below are produced from quality cast aluminum. Wiring is designed to run externally unless otherwise noted in the description.

TOP OF MAST/BACK TO BACK SIGNAL MOUNTING BRACKET
PART NO:
5Z4595-X

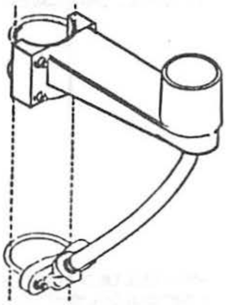


FRONT OR SIDE OF MAST SIGNAL MOUNTING BRACKET
PART NO: 5Z4609-X

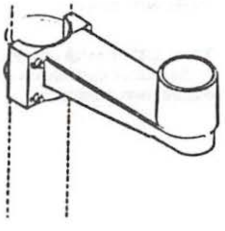
*



FRONT OR SIDE OF MAST SIGNAL MOUNTING BRACKET (WITH EXTERNAL CABLE CONDUIT ASSEMBLY)
PART NO: 5Z4600-X



FRONT OR SIDE OF MAST SIGNAL MOUNTING BRACKET
PART NO: 5Z4601-X

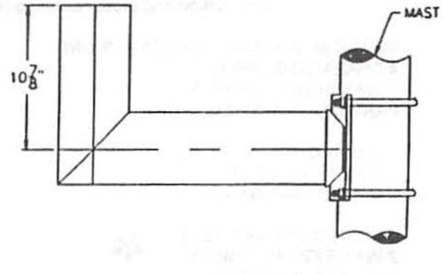


MOUNTING BRACKETS (CONT.)

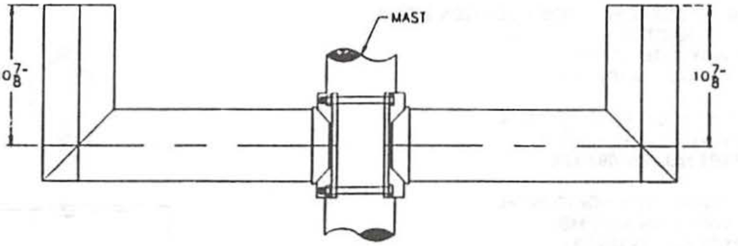
FOR WAYSIDE SIGNALS WITH 5" MAST MOUNTING

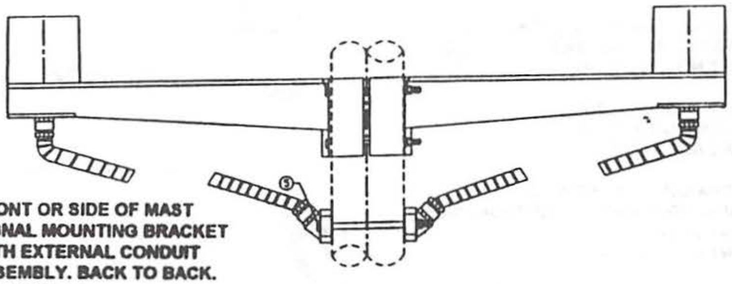
FRONT OR SIDE OF MAST SIGNAL MOUNTING BRACKET FABRICATED 22".
PART NO: 5Z7131-X

*



FRONT OR SIDE OF MAST SIGNAL MOUNTING BRACKET FABRICATED 22", BACK TO BACK.
PART NO: 5Z7131-2X



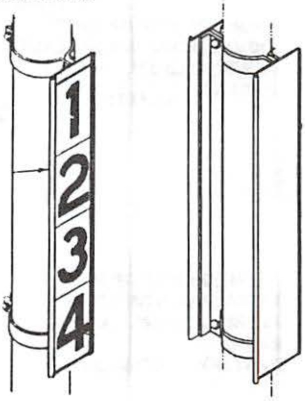


FRONT OR SIDE OF MAST SIGNAL MOUNTING BRACKET WITH EXTERNAL CONDUIT ASSEMBLY. BACK TO BACK.
T NO: 5Z4600-2X

SIGNS

WAYSIDE SIGNAL SIGNS VERTICAL AND HORIZONTAL

Sign for wayside signal locations shown below are shipped with mounting hardware. Please contact L & W sales office for information and proper ordering references.



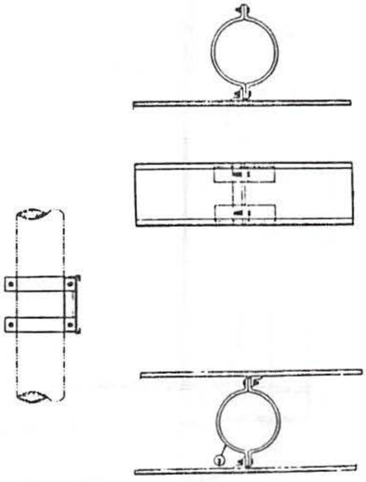
VERTICAL WAYSIDE LOCATION SIGNS:

4 CHARACTER VERTICAL
1 WAY SIGN ASSEMBLY.
PART NO. 7A1092-4X

5 CHARACTER VERTICAL
1 WAY SIGN ASSEMBLY.
PART NO. 7A1093-3X

4 CHARACTER VERTICAL *
2 WAY SIGN ASSEMBLY.
PART NO. 7A1092-14X

5 CHARACTER VERTICAL
2 WAY SIGN ASSEMBLY.
PART NO. 7A1093-13X



HORIZONTAL WAYSIDE LOCATION SIGNS:

2 CHARACTER HORIZONTAL
1 WAY SIGN ASSEMBLY
PART NO. 7A1097-2X

2 CHARACTER HORIZONTAL
2 WAY SIGN ASSEMBLY
PART NO. 7A1097-12X

3 CHARACTER HORIZONTAL
1 WAY SIGN ASSEMBLY
PART NO. 7A1097-3X

3 CHARACTER HORIZONTAL
2 WAY SIGN ASSEMBLY
PART NO. 7A1097-13X

4 CHARACTER HORIZONTAL *
1 WAY SIGN ASSEMBLY
PART NO. 7A1097-4X

4 CHARACTER HORIZONTAL
2 WAY SIGN ASSEMBLY
PART NO. 7A1097-14X

ALPHA OR NUMERIC SIGN:

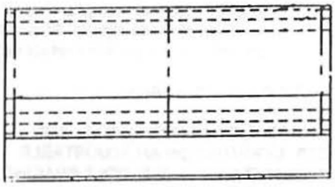
ALPHA OR NUMERIC INDIVIDUAL SIGNS
0 - 9 OR A - Z
PART NO. 7A1094-#

*

SIGNS (CONT.)

DWARF SIGNAL LOCATION SIGN:

4 CHARACTER HORIZONTAL 1 WAY SIGN ASSEMBLY. FOR MOUNTING ON TOP OF DWARF SIGNALS. 3" TALL CHARACTER SLIDE.
PART NO. 7A1101



INFORMATION OR WARNING SIGNS:

BEGIN CTC SIGN
PART NO. 7A1078E

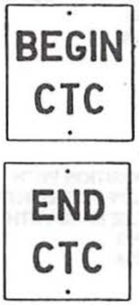
BEGIN CTC SIGN ASSEMBLY
WITH 2" POST MOUNTING.
PART NO. 7A1078E2

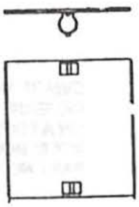
END CTC SIGN
PART NO. 7A1079E

END CTC SIGN ASSEMBLY
WITH 2" POST MOUNTING.
PART NO. 7A1079E2

"D" DISTANCE SIGN
PART NO. 7A1055

"D" DISTANCE SIGN ASSEMBLY
WITH 5" MAST MOUNTING.
PART NO. 7A1055-X





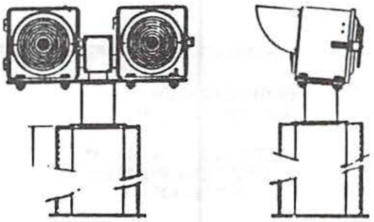
SPECIALTY SIGNALS

Wayside signals and Dwarf signals shown below have been produced to meet customer needs and specifications. We have shown a small selection of these signals. Should there be a requirement for a specialty signal, please contact our sales office.

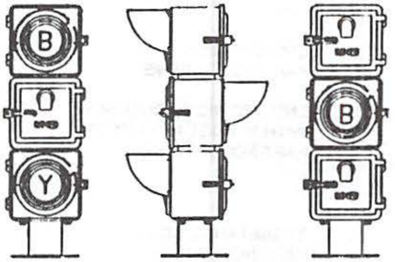
SPECIALTY DWARF SIGNALS:

DWARF SIGNAL 2 POSITION WITH 8 3/8" ASPECTS, MOUNTED ON AN ADJUSTABLE SIGNAL MOUNT WITH 8" X 8" BOLT SPACING. PART NO. 5B4642A-11YR

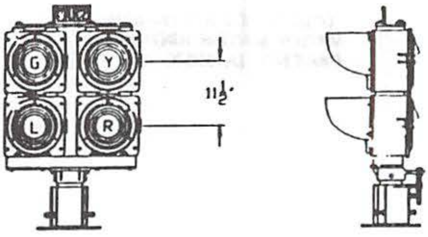
DWARF SIGNAL 2 POSITION HORIZONTAL WITH 8 3/8" ASPECTS. MOUNTED ON A FIXED 7 DEGREE BASE, INCLUDING STEEL FOUNDATION. PART NO. 5B4632-5X

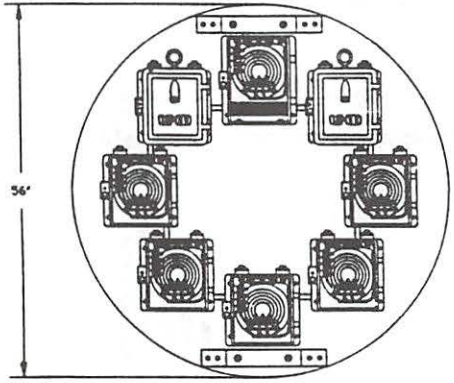


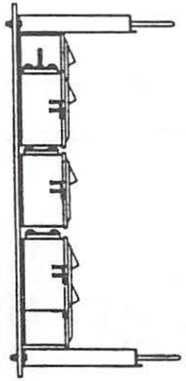
DWARF SIGNAL 3 POSITION WITH REVERSED 8 3/8" ASPECT. MOUNTED ON A FIXED 7 DEGREE BASE WITH 8" X 8" BOLT SPACING. PART NO. 5B4633-15X



DWARF SIGNAL 4 POSITION ARRANGED IN A SQUARE, WITH 8 3/8" ASPECTS. MOUNTED ON A FIXED 7 DEGREE BASE WITH 8" X 8" BOLT SPACING. PART NO. 5B4644-4X







DATE	1-21-92	L&W INDUSTRIES, INC.		
DWN BY	M.D.W.			
CHK BY				
ENGR		SIZE B	CODE IDENT. NO. CPLSIG	DRAWING NO. CPLSIG
UNLESS OTHERWISE SPEC. ALL TOLERANCES EQUAL 1/32		SCALE NONE		(1-12)

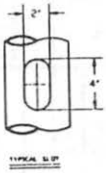
REPLACEMENT PARTS

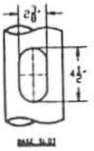
WAYSIDE SIGNAL REPLACEMENT PARTS

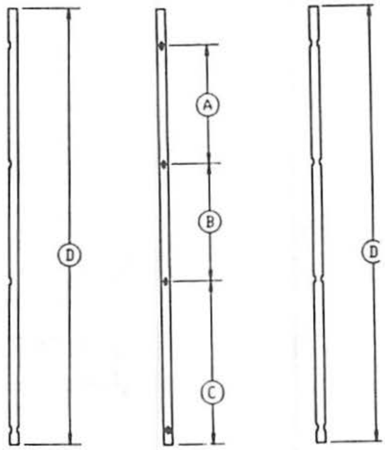
The replacement parts shown on the following pages are broken down in categories. Not all item that relate to the Wayside signals are shown in this section. Please refer to the Main product sections for further information.

SIGNAL MAST 5":

SIGNAL MAST FOR USE WITH SPLIT 5" BASE ASSEMBLIES.



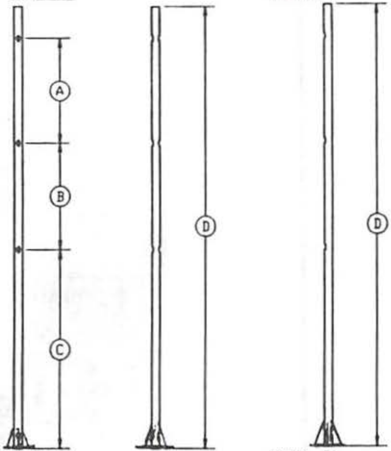




REF. A **REF. B**

Using the Signal Mast order reference "A" and reference "B" guide you can determine the dimension for (A), (B), (C), and (D). Reference "B" has slots that are to be back to back. Then contact our sales department for proper order reference numbers.

SIGNAL MAST WITH FABRICATED / WELDED BASE ASSEMBLIES.



REF. C **REF. D**

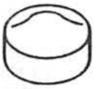
Using the Signal Mast order reference "C" and reference "D" guide you can determine the dimension for (A), (B), (C), and (D). Reference "D" has slots that are to be back to back. Then contact our sales department for proper order reference numbers.

L & W INDUSTRIES

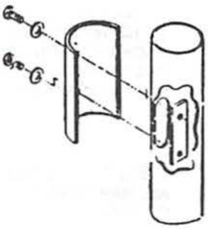
REPLACEMENT PARTS

WAYSIDE SIGNAL REPLACEMENT PARTS

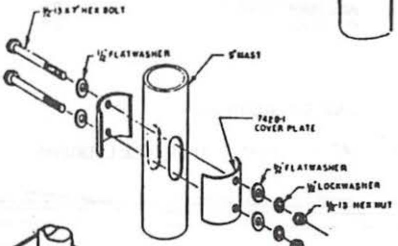
PINNACLES:
PINNACLE 5" AND 4" COMBINATION COMPLETE WITH SET SCREW. *
PART NO. 5L7500-X



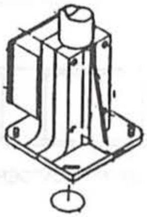
COVER PLATES, FOR SIGNAL MAST:
COVER PLATE, FOR 2" X 4" SIGNAL ARM SLOT, ONE WAY. WITH ALL MOUNTING HARDWARE. *
PART NO. 5Z7428-2X



COVER PLATE, FOR 2" X 4" SIGNAL ARM SLOT, BACK TO BACK. WITH ALL MOUNTING HARDWARE. *
PART NO. 5Z7428-1X

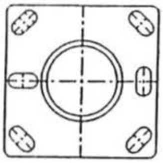

1/2-13 X 7" HEX BOLT
1/2" FLATWASHER
5" MAST
7428-1
COVER PLATE
1/2" FLATWASHER
1/2" LOCKWASHER
1/2-13 HEX NUT

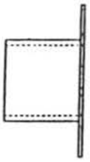
COVER PLATE, FOR BOTTOM OF 5" SIGNAL MAST (RODENT PLATE) *
PART NO. 5Z5554



DWARF SIGNAL ADAPTER MOUNTS:
DWARF SIGNAL MOUNT WITH 8" X 8" BOLT SPACING, FOR 5" ADJUSTABLE MAST MOUNT
PART NO. 5Z4520-1

DWARF SIGNAL MOUNT WITH 6 3/4" X 6 3/4" BOLT SPACING, FOR 5" ADJUSTABLE MAST MOUNT.
PART NO. 5Z4520-3



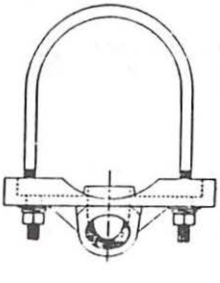


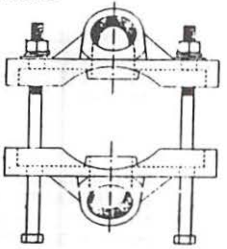
L&W

REPLACEMENT PARTS

WAYSIDE SIGNAL REPLACEMENT PARTS

SIGNAL MOUNTING BRACKETS:

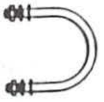




CABLE ENTRANCE ASSEMBLY
(1 1/2" NPT HOLE), COMPLETE *
WITH 5" U' BOLT.
PART NO. 5Z4603X

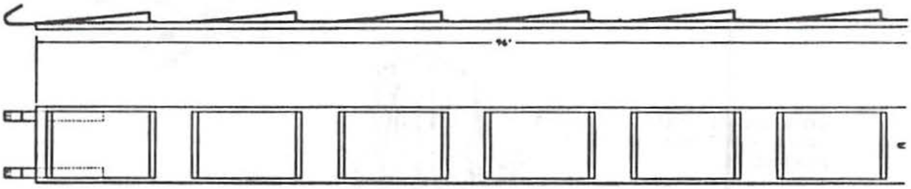
CABLE ENTRANCE ASSEMBLY
(1 1/2" NPT HOLE), BACK TO
BACK MOUNTING WITH STRAIGHT
BOLTS.
PART NO. 5Z4603-1X *

U' BOLT ASSEMBLY 5" WITH
ALL HARDWARE.
PART NO. *



LADDER GUARDS:

LADDER GUARD FOR STEEL LADDERS PART NO. 5J7407-X



LADDER GUARD FOR ALL ALUMINUM LADDERS PART NO. 5J

REPLACEMENT PARTS

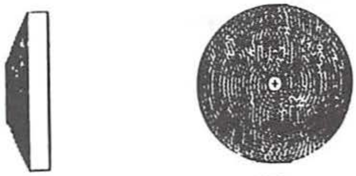
WAYSIDE SIGNAL REPLACEMENT PARTS

COVER PLATES:

8 3/8" ASPECT BLANK COVER PLATE *
WITH GASKET. FOR COLORLIGHT
SIGNALS.
PART NO.

6 3/8" ASPECT BLANK COVER PLATE *
WITH GASKET. FOR DWARF SIGNALS
PART NO.

PHANKILL UNITS:



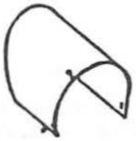
PHANKILL UNIT, HONEYCOMB REPLACEMENT
FOR ALL 8 3/8" SIGNALS.
PART NO. 5Z4801

PHANKILL UNIT, HONEYCOMB REPLACEMENT
FOR ALL 6 3/8" SIGNALS.
PART NO. 5Z4801-1

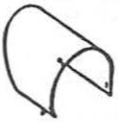
LENS, CLEAR FLAT PLAIN 1/4" THICK
FOR 8 3/8" PHANKILL UNITS
PART NO. 7B4590

LENS, CLEAR FLAT PLAIN 1/4" THICK
FOR 6 3/8" PHANKILL UNITS
PART NO. 7B4590-1

HOODS:



HOOD FOR COLORLIGHT SIGNAL *
WITH MOUNTING HARDWARE
PART NO. 5Z4541



HOOD FOR DWARF SIGNAL (LONG)
WITH MOUNTING HARDWARE
PART NO.

HOOD FOR DWARF SIGNAL (SHORT)
WITH MOUNTING HARDWARE
PART NO.

REPLACEMENT PARTS

DOUBLET ASSEMBLIES

DOUBLET LENS ASSEMBLY (REAR REMOVABLE 8 3/8"):

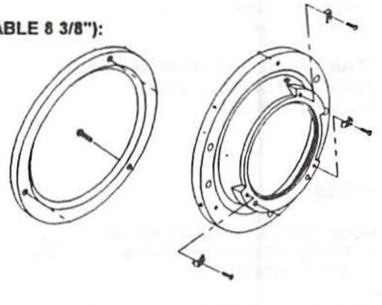
GASKET, DOUBLET HOUSING
PART NO. 5Z4542-5A

GASKET, LENS RETAINING
RING.
PART NO. 5Z4552-1A

DOUBLET LENS ASSEMBLY (FRONT REMOVABLE 8 3/8"):

DOUBLET LENS HOUSING
PART NO. 5B4535

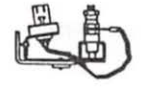
RETAINING RING WITH GASKET
PART NO. 5B4552-1

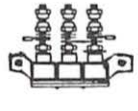


LAMP BRACKET ASSEMBLIES:

LAMP BRACKET ASSEMBLY, FOR ALL
STYLE COLORLIGHTS AND DWARF
LIGHT SIGNALS.
PART NO.

LAMP BRACKET ASSEMBLY (FOCUSED)
FOR ALL STYLE COLORLIGHTS AND
DWARF LIGHT SIGNALS.
PART NO.

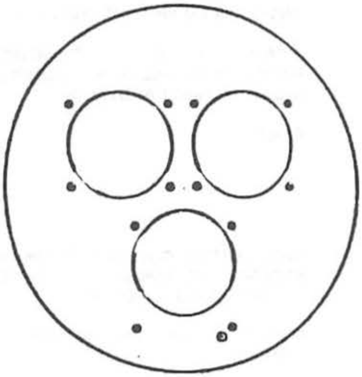




REPLACEMENT PARTS

WAYSIDE SIGNAL REPLACEMENT PARTS

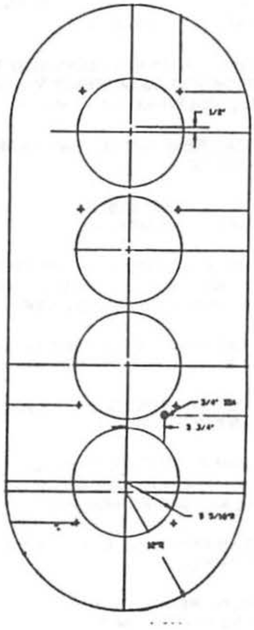
BACKGROUNDS:



**TRIANGULAR COLORLIGHT BACKGROUND
WITH MOUNTING HARDWARE.
PART NO.**

**ONE POSITION VERTICAL BACKGROUND
FOR REAR REMOVABLE LENS
ASSEMBLY COLORLIGHT.
PART NO. 5Z8100-BS**

**ONE POSITION VERTICAL BACKGROUND
FOR FRONT REMOVABLE LENS
ASSEMBLY COLORLIGHT.
PART NO. 5Z4525**



**TWO POSITION VERTICAL BACKGROUND
FOR REAR REMOVABLE LENS
ASSEMBLY COLORLIGHT.
PART NO. 5Z8200-BS**

**TWO POSITION VERTICAL BACKGROUND
FOR FRONT REMOVABLE LENS
ASSEMBLY COLORLIGHT.
PART NO. 5Z4526**

**THREE POSITION VERTICAL BACKGROUND
FOR REAR REMOVABLE LENS
ASSEMBLY COLORLIGHT.
PART NO. 5Z8300-BS**

**THREE POSITION VERTICAL BACKGROUND
FOR FRONT REMOVABLE LENS
ASSEMBLY COLORLIGHT.
PART NO. 5Z4527**

**FOUR POSITION VERTICAL BACKGROUND
FOR REAR REMOVABLE LENS
ASSEMBLY COLORLIGHT.
PART NO. 5Z8400-BS**

**FOUR POSITION VERTICAL BACKGROUND
FOR FRONT REMOVABLE LENS
ASSEMBLY COLORLIGHT.
PART NO. 5Z4528**

REPLACEMENT PARTS

WAYSIDE SIGNAL REPLACEMENT PARTS

SNOWSHIELD AND BACKGROUND ASSEMBLIES:

TRIANGULAR COLORLIGHT SNOWSHIELD AND BACKGROUND ASSEMBLY. COMPLETE WITH ALL MOUNTING HARDWARE.

PART NO.

ONE POSITION COLORLIGHT SNOWSHIELD AND BACKGROUND ASSEMBLY. COMPLETE WITH ALL MOUNTING HARDWARE.

REAR REMOVABLE LENS ASSEMBLY SIGNAL
PART NO.

FRONT REMOVABLE LENS ASSEMBLY SIGNAL
PART NO. 5Z4731-X

TWO POSITION COLORLIGHT SNOWSHIELD AND BACKGROUND ASSEMBLY. COMPLETE WITH ALL MOUNTING HARDWARE.

REAR REMOVABLE LENS ASSEMBLY SIGNAL
PART NO.

FRONT REMOVABLE LENS ASSEMBLY SIGNAL
PART NO. 5Z4732-X

THREE POSITION COLORLIGHT SNOWSHIELD AND BACKGROUND ASSEMBLY. COMPLETE WITH ALL MOUNTING HARDWARE.

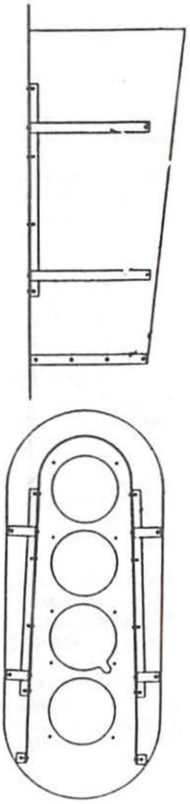
REAR REMOVABLE LENS ASSEMBLY SIGNAL
PART NO.

FRONT REMOVABLE LENS ASSEMBLY SIGNAL
PART NO. 5Z4733-X

FOUR POSITION COLORLIGHT SNOWSHIELD AND BACKGROUND ASSEMBLY. COMPLETE WITH ALL MOUNTING HARDWARE.

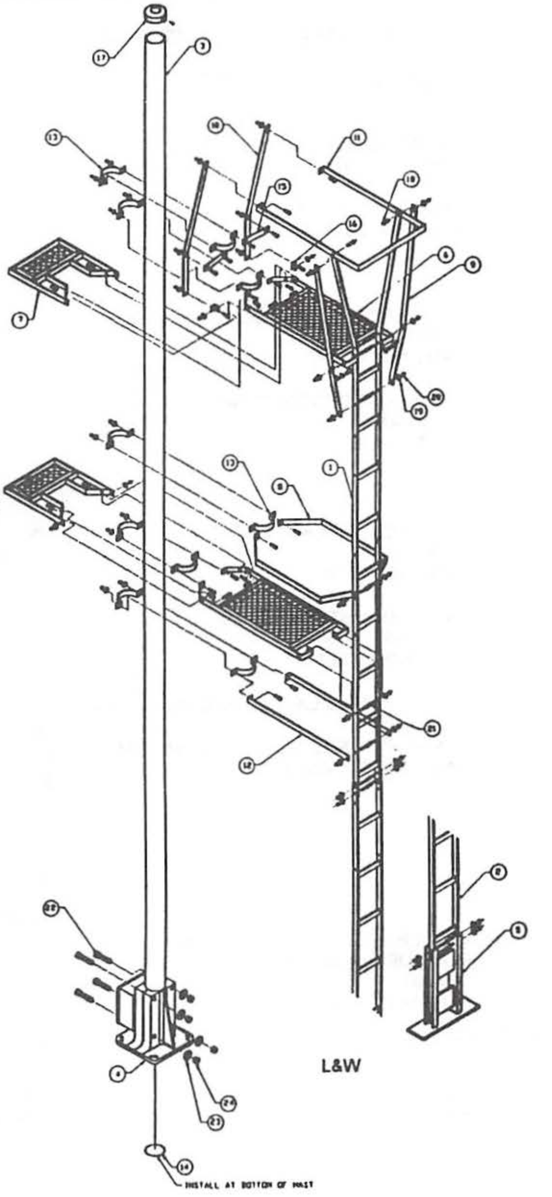
REAR REMOVABLE LENS ASSEMBLY SIGNAL
PART NO.

FRONT REMOVABLE LENS ASSEMBLY SIGNAL
PART NO. 5Z4734-X



REPLACEMENT PARTS

LADDER AND PLATFORMS, STEEL:


17
3
10
11
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16
18
6
9
7
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19
13
8
1
21
12
2
5
22
4
24
23
14
INSTALL AT BOTTOM OF MAST
L&W

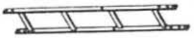
ITEM	DESCRIPTION	PART NO.
1	LADDER	5J7461-58
2	LADDER EXTENSION	*
3	MAST	*
4	BASE	*
5	FOUNDATION	8A7410-X
6	PLATFORM, REAR	7J7465-X
7	PLATFORM, FRONT	7J7470-X
8	HANDRAIL	7J7495
9	TOP BRACE	7J7480
10	HANDRAIL SUPPORT	7J7482
11	TOP HANDRAIL	7J7490
12	STAY SIDE	7J7455
13	5" CLAMP	7J7475
14	RODENT PLATE	5L5555
15	STIFFENER	7J7483
16	BOLT CLIP	7J7472
17	PINNACLE, 5"	5L7500-X
18	BOLT 1/2-13 X 2"	REF. A
19	LOCKWASHER 1/2"	REF. B
20	NUT 1/2-13	REF. C
21	BOLT 1/2-13 X 1 1/2"	REF. D
22	BOLT 1-8 X 7 1/2"	REF. E
23	FLATWASHER 1"	REF. F
24	NUT 1-8	REF. G

* These item noted with an asterisk can be located in detail in other areas of this publication

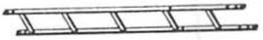
REPLACEMENT PARTS

LADDER AND PLATFORMS, STEEL (CONT.):

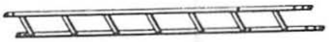
LADDER EXTENSION 5 FOOT
PART NO. 5J7510



LADDER EXTENSION 7 FOOT
PART NO. 5J7509

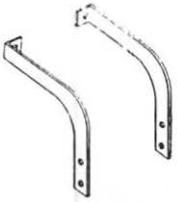


LADDER EXTENSION 9 FOOT
PART NO. 5J7511



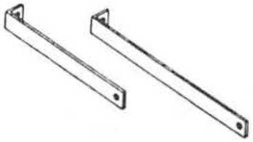
TOP STAY 5 DEGREE SLANT
RIGHT HAND.
PART NO. 5J7850-RH

TOP STAY 5 DEGREE SLANT
LEFT HAND.
PART NO. 5J7850-LH



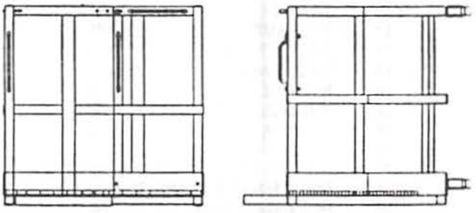
STAY SIDE, INTERMEDIATE
16" LONG.
PART NO. 5J7860

STAY SIDE, INTERMEDIATE
21" LONG.
PART NO. 5J7870

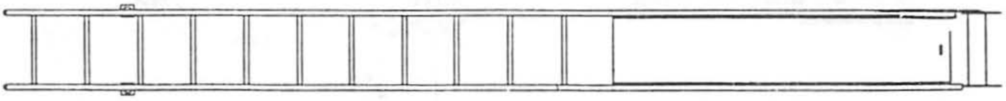


ALL ALUMINUM LADDER AND PLATFORM:

PLATFORM ASSEMBLY ALL ALUMINUM.
PART NO. 5J55038-X



LADDER ASSEMBLY 18' FOR SINGLE PLATFORM MOUNTING. WITH LADDER GUARD.
PART NO. 5J55343-X

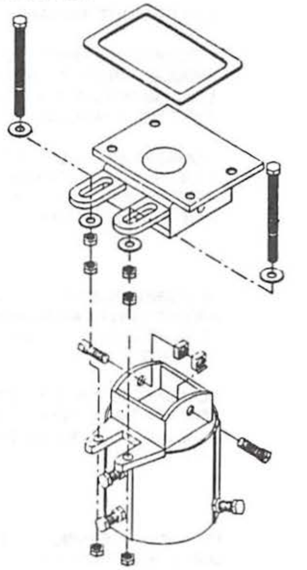


REPLACEMENT PARTS

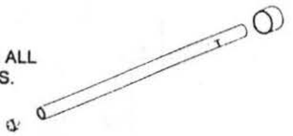
WAYSIDE SIGNAL REPLACEMENT PARTS

COLORLIGHT SIGNALS (CONT.)

POST MOUNT 5", WITH ADJUSTABLE TEETER ASSEMBLY. FOR ALL DWARF AND COLORLIGHT SIGNALS WITH ADJUSTABLE MOUNTING.
PART NO. 5Z4771-X



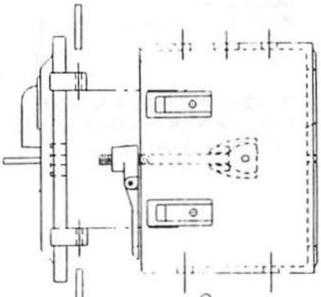
PEEP SIGHT KIT, FOR ALL COLORLIGHT SIGNALS.
PART NO. 5Z4516-X2



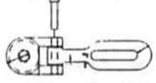
DWARF SIGNALS:

HOUSING ASSEMBLY, TOP AND MIDDLE. FOR DWARF SIGNALS 6 3/8" ASPECT.
PART NO. 5B4693-X

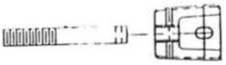
HOUSING ASSEMBLY, BOTTOM FOR DWARF SIGNALS 6 3/8" ASPECT.
PART NO. 5B4693-1X



HASP ASSEMBLY, FOR DWARF SIGNAL DOOR.
PART NO. 5B4562-X



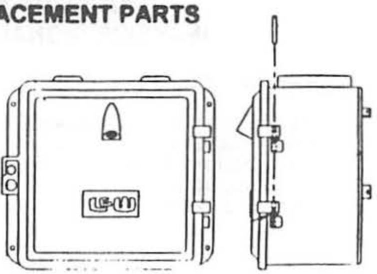
LOCK BOLT ASSEMBLY, FOR DWARF SIGNAL DOOR.
PART NO. 5B4561-X



REPLACEMENT PARTS

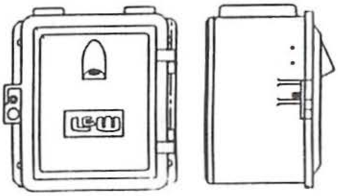
WAYSIDE SIGNAL REPLACEMENT PARTS

COLORLIGHT SIGNALS:



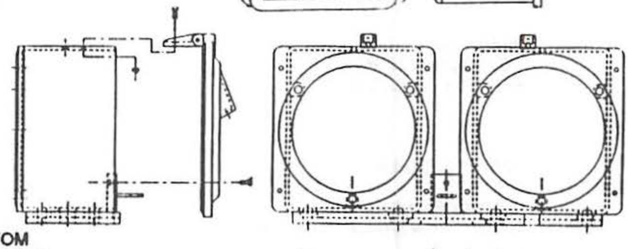
HOUSING ASSEMBLY, TOP AND MIDDLE FOR FRONT REMOVABLE LENS ASSEMBLY COLORLIGHTS.
PART NO. 5Z4543-3X

HOUSING ASSEMBLY, BOTTOM FOR FRONT REMOVABLE LENS ASSEMBLY COLORLIGHT.
PART NO. 5Z4543-1X

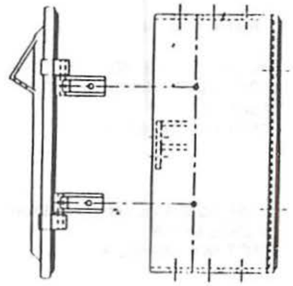


HOUSING ASSEMBLY, TOP AND MIDDLE FOR REAR REMOVABLE LENS ASSEMBLY COLORLIGHTS.
PART NO. 5Z

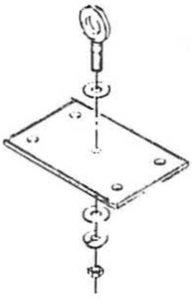
HOUSING ASSEMBLY, BOTTOM FOR REAR REMOVABLE LENS ASSEMBLY COLORLIGHTS.
PART NO. 5Z



HOUSING ASSEMBLY, TOP UNITS FOR TRIANGULAR COLORLIGHTS.
PART NO. 5Z4546-X1



HOUSING ASSEMBLY, BOTTOM FOR TRIANGULAR COLORLIGHTS.
PART NO. 5Z4542-1X



TOP PLATE WITH LIFTING EYE BOLT ASSEMBLY.
PART NO. 5Z4660-1X

REPLACEMENT PARTS

WAYSIDE SIGNAL REPLACEMENT PARTS

COLORLIGHT SIGNALS:

LOCK BAR FOR 2 POSITION COLORLIGHT SIGNAL
WITH REAR REMOVABLE LENS ASSEMBLY.
PART NO. 5Z4450

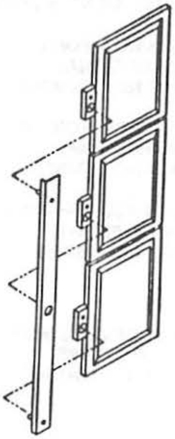
LOCK BAR FOR 3 POSITION COLORLIGHT SIGNAL
WITH REAR REMOVABLE LENS ASSEMBLY.
PART NO. 5Z4453

LOCK BAR FOR 4 POSITION COLORLIGHT SIGNAL
WITH REAR REMOVABLE LENS ASSEMBLY.
PART NO. 5Z4454

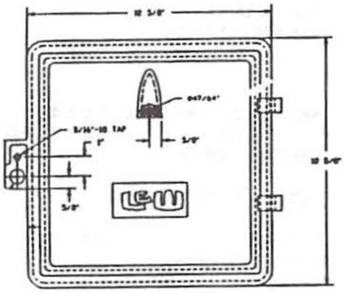
LOCK BAR FOR 2 POSITION COLORLIGHT SIGNAL
WITH FRONT REMOVABLE LENS ASSEMBLY.
PART NO. 5Z4508-1

LOCK BAR FOR 3 POSITION COLORLIGHT SIGNAL
WITH FRONT REMOVABLE LENS ASSEMBLY.
PART NO. 5Z4508

LOCK BAR FOR 4 POSITION COLORLIGHT SIGNAL
WITH FRONT REMOVABLE LENS ASSEMBLY.
PART NO. 5Z4508-2

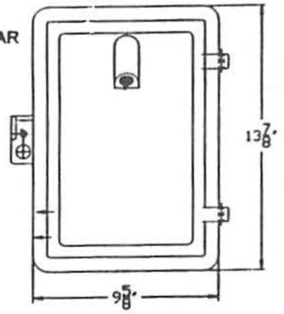


DOOR ASSEMBLY, REPLACEMENT FOR REAR
REMOVABLE LENS ASSEMBLY COLORLIGHTS.
COMPLETE WITH HARDWARE AND GASKET.
PART NO. 5Z4545-5



DOOR ASSEMBLY, REPLACEMENT FOR FRONT
REMOVABLE LENS ASSEMBLY COLORLIGHTS.
COMPLETE WITH HARDWARE AND GASKET.
PART NO. 5Z4545-X

DOOR ASSEMBLY, REPLACEMENT FOR
BOTTOM ASPECT HOUSING ON TRIANGULAR
COLORLIGHTS.
PART NO. 5Z4544-X



L&W

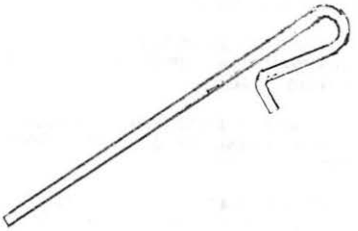
REPLACEMENT PARTS
WAYSIDE SIGNAL REPLACEMENT PARTS

DWARF SIGNALS (CONT.):

LOCK ROD, FOR 2 POSITION
DWARF SIGNAL.
PART NO. 5B4560-2

LOCK ROD, FOR 3 POSITION
DWARF SIGNAL
PART NO. 5B4560-3

LOCK ROD FOR 4 POSITION
DWARF SIGNAL
PART NO. 5B4560-4



VENT CASTING, FOR DWARF
SIGNAL DOORS.
PART NO. 5B4568

VENT GASKET, FOR DWARF
SIGNAL DOORS.
PART NO. 5B4569

ANTI - PHANTOM SCREEN 6 3/8",
FOR ALL DWARF LENS ASSEMBLIES.
PART NO. 7B4580-1

DOUBLET ASSEMBLIES:

DOUBLET LENS HOUSING 6 3/8",
FOR ALL DWARF SIGNALS.
PART NO.

GASKET, FOR DOUBLET LENS
HOUSING 6 3/8".
PART NO. 5B4640A

OUTER LENS RETAINING RING
6 3/8", FOR ALL DWARF SIGNALS.
PART NO. 5B4638-1

L & W INDUSTRIES

GRADE

CROSSINGS

FLASHER ASSEMBLIES
FLASHER/GATE ASSEMBLIES
FLASHING LIGHT ASSEMBLIES
JUNCTION BOX CROSSARMS
SIGNS & SIGN MOUNTING HARDWARE
BELLS
CROSSING GATEARMS & LAMPS
CONVERSION BRACKETS & BREAKAWAYS
HIGH WIND GUARDS
WALKOUT CANTILEVERS
PEDESTRIAN CROSSING SIGNALS
NO LEFT TURN SIGNALS
STUB MAST ASSEMBLIES
SIDE LIGHT EXTENSION BRACKET
REPLACEMENT PARTS

L & W INDUSTRIES

TURNKEY INSTALLATIONS

L & W OFFERS OUR CUSTOMERS

*****CIRCUIT DESIGN*****

*****FACTORY WIRING*****

*****PROCUREMENT OF MATERIALS*****

*****INSTALLATION*****

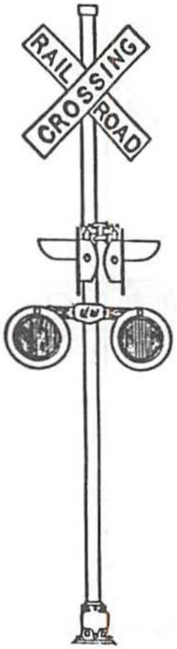
FOR HIGHWAY
CROSSING
OR
SIGNAL PROJECTS

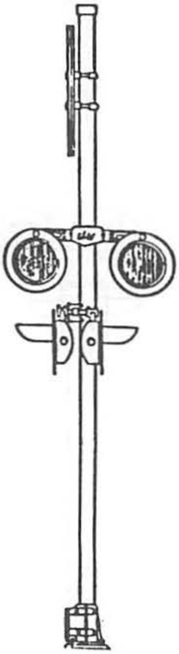
TO *YOUR* SPECIFICATIONS

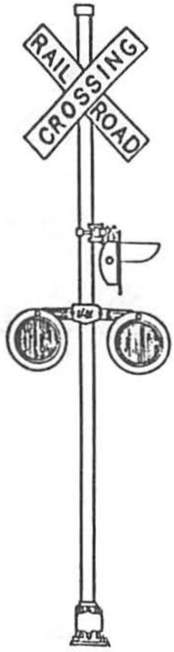
HIGHWAY CROSSING SIGNAL ASSEMBLIES

4" MAST

The highway Crossing Signal Assemblies shown below are with 12" Flashing lights. With different light, and mast standards in the industry, we recommend that you contact our sales office for proper ordering reference, if the assemblies shown do not match your railroads requirements.







PART NO. 6A5265-X

PART NO. 6A5260-X

HIGHWAY CROSSING SIGNAL ASSEMBLY 4" MAST X 15 FT. WITH 4" JUNCTION BOX SPLIT BASE, TWO WAY JUNCTION BOX CROSSARM FOR MAIN LIGHTS AND TWO WAY JUNCTION BOX CROSSARM FOR ADDITIONAL SIDE LIGHTS. PINNACLE, RAILROAD CROSSING SIGN, AND SPECIFIED TYPE OF LIGHT UNITS.

HIGHWAY CROSSING SIGNAL ASSEMBLY 4" MAST X 15 FT. WITH 4" JUNCTION BOX SPLIT BASE, TWO WAY JUNCTION BOX CROSSARM FOR MAIN LIGHTS AND ONE WAY JUNCTION BOX CROSSARM FOR ADDITIONAL SIDE LIGHTS. PINNACLE, RAILROAD CROSSING SIGN, AND SPECIFIED TYPE OF LIGHT UNITS.

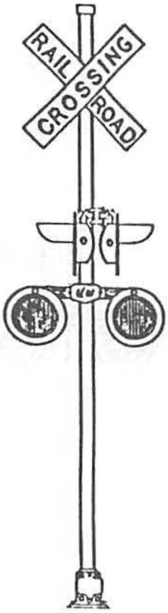
8" FLASHING LIGHTS PART NO. 6A5065-X

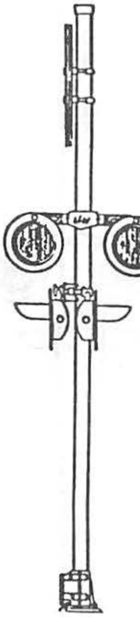
8" FLASHING LIGHTS PART NO. 6A5260-X

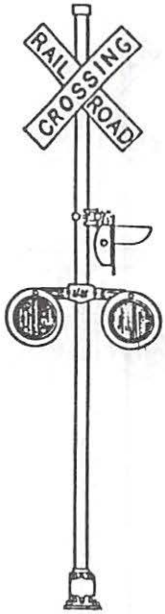
HIGHWAY CROSSING SIGNAL ASSEMBLIES

4" MAST

The highway Crossing Signal Assemblies shown below are with 12" Flashing lights. With different light, and mast standards in the industry, we recommend that you contact our sales office for proper ordering reference, if the assemblies shown do not match your railroads requirements.







PART NO. 6A5265-X

HIGHWAY CROSSING SIGNAL ASSEMBLY 4" MAST X 15 FT. WITH 4" JUNCTION BOX SPLIT BASE, TWO WAY JUNCTION BOX CROSSARM FOR MAIN LIGHTS AND TWO WAY JUNCTION BOX CROSSARM FOR ADDITIONAL SIDE LIGHTS. PINNACLE, RAILROAD CROSSING SIGN, AND SPECIFIED TYPE OF LIGHT UNITS.

8" FLASHING LIGHTS PART NO. 6A5065-X

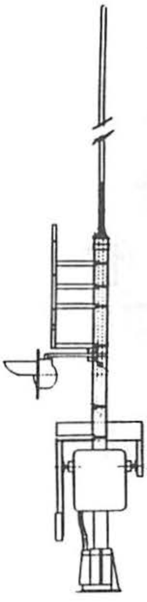
PART NO. 6A5260-X

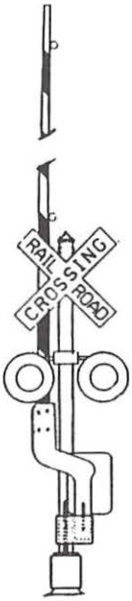
HIGHWAY CROSSING SIGNAL ASSEMBLY 4" MAST X 15 FT. WITH 4" JUNCTION BOX SPLIT BASE, TWO WAY JUNCTION BOX CROSSARM FOR MAIN LIGHTS AND ONE WAY JUNCTION BOX CROSSARM FOR ADDITIONAL SIDE LIGHTS. PINNACLE, RAILROAD CROSSING SIGN, AND SPECIFIED TYPE OF LIGHT UNITS.

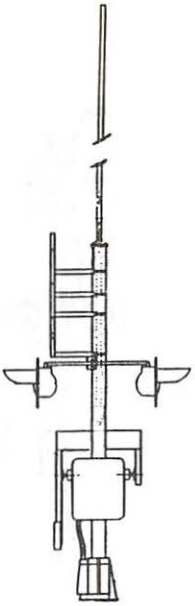
8" FLASHING LIGHTS PART NO. 6A5260-X

GATE CROSSING SIGNAL ASSEMBLIES
5" MAST

The Gate Crossing Signal Assemblies shown below are with 12" Flashing lights, and less Gate mechanism. With different light, and mast standards in the industry, we recommend that you contact our sales office for proper ordering reference, if the assemblies shown do not match your railroads requirements.







PART NO. 6A5350-X

**GATE CROSSING SIGNAL ASSEMBLY
5" MAST X 13 FT. WITH 5" JUNCTION BOX
SPLIT BASE, ONE WAY JUNCTION BOX
CROSSARM, PINNACLE, RAILROAD
CROSSING SIGN. SPECIFIED TYPE OF
LIGHT UNITS, AND GATE MECHANISM.**

8" FLASHING LIGHTS PART NO. 6A5351-X

PART NO. 6A5370-X

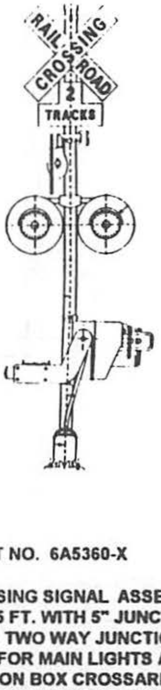
**GATE CROSSING SIGNAL ASSEMBLY
5" MAST X 13 FT. WITH 5" JUNCTION BOX
SPLIT BASE, TWO WAY JUNCTION BOX
CROSSARM, PINNACLE, RAILROAD
CROSSING SIGN. SPECIFIED TYPE OF
LIGHT UNITS, AND GATE MECHANISM.**

8" FLASHING LIGHTS PART NO. 6A5371-X

GATE CROSSING SIGNAL ASSEMBLIES

5" MAST

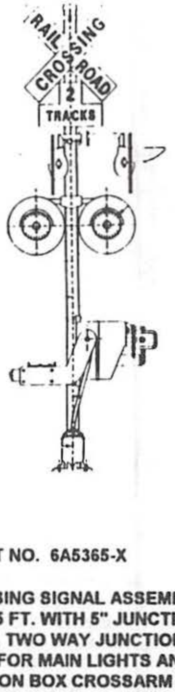
The Gate Crossing Signal Assemblies shown below are with 12" Flashing light, and less Gate mechanism. With different light, and mast standards in the industry, we recommend that you contact our sales office for proper ordering reference, if the assemblies shown do not match your railroads requirements.



PART NO. 6A5360-X

GATE CROSSING SIGNAL ASSEMBLY 5" MAST X 15 FT. WITH 5" JUNCTION BOX SPLIT BASE, TWO WAY JUNCTION BOX CROSSARM FOR MAIN LIGHTS AND TWO WAY JUNCTION BOX CROSSARM FOR ADDITIONAL SIDE LIGHTS. PINNACLE, RAILROAD CROSSING SIGN, AND SPECIFIED TYPE OF LIGHT UNITS, AND GATE MECHANISM.

8" FLASHING LIGHTS PART NO. 6A5361-X



PART NO. 6A5365-X

GATE CROSSING SIGNAL ASSEMBLY 5" MAST X 15 FT. WITH 5" JUNCTION BOX SPLIT BASE, TWO WAY JUNCTION BOX CROSSARM FOR MAIN LIGHTS AND ONE WAY JUNCTION BOX CROSSARM FOR ADDITIONAL SIDE LIGHTS. PINNACLE, RAILROAD CROSSING SIGN, AND SPECIFIED TYPE OF LIGHT UNITS, AND GATE MECHANISM.

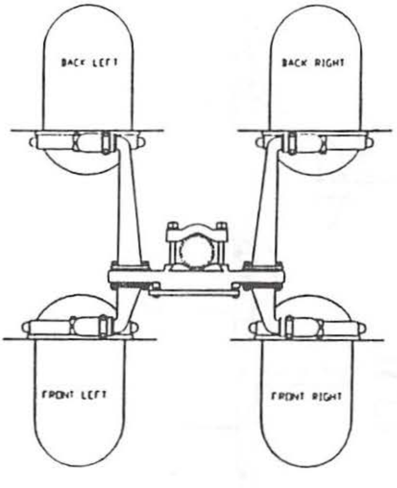
8" FLASHING LIGHTS PART NO. 6A5366-1X

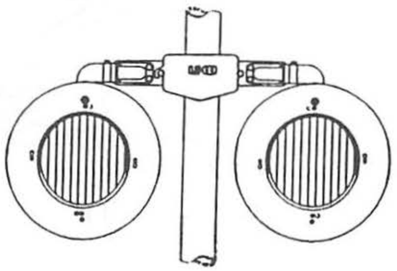
FLASHING LIGHT ASSEMBLIES

WITH JUNCTION BOX CROSSARMS

L & W Flashing light signal assemblies are shipped complete with aluminum hood, and background, pre-wired to the junction box crossarm assemblies. Lens type must be specified when ordering.

FLASHING LIGHT SIGNAL ASSEMBLY, TWO WAY:





WITH 12" LIGHTS

MAST SIZE	CLAMP TYPE BRACKETS	THREADED TYPE BRACKETS
FOR 4"	6A6247-X	6A6247-XT
FOR 5"	6A6247-1X	6A6247-1XT
FOR 8"	6A6247-3X	6A6247-3XT
FOR 10"	6A6247-4X	6A6247-4XT
FOR 12"	6A6247-5X	6A6247-5XT

WITH 8" LIGHTS

FOR 4"	6A5247-X	6A5247-XT
FOR 5"	6A5247-1X	6A5247-1XT
FOR 8"	6A5247-3X	6A5247-3XT
FOR 10"	6A5247-4X	6A5247-4XT
FOR 12"	6A5247-5X	6A5247-5XT

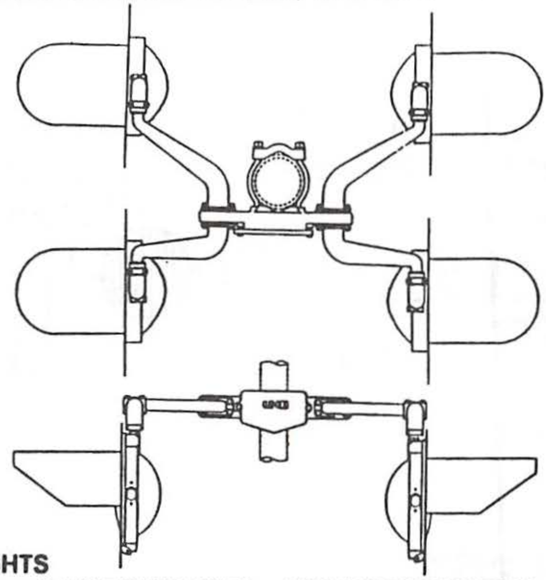
12 inch Flashing Light Signal Units are shipped with 10 volt 25 watt, and. 8" Flashing Light Signal Units are shipped with 10 volt 18 watt precision signal bulbs, factory focused.

FLASHING LIGHT ASSEMBLIES

WITH JUNCTION BOX CROSSARMS

L & W Flashing light signal assemblies are shipped complete with aluminum hood, and background, pre-wired to the junction box crossarm assemblies. Lens type must be specified when ordering.

FLASHING LIGHT SIGNAL ASSEMBLY, TWO WAY:



WITH 12" LIGHTS

MAST SIZE	CLAMP TYPE BRACKETS	THREADED TYPE BRACKETS
FOR 4"	6A6232-X	6A6232-XT
FOR 5"	6A6232-1X	6A6232-1XT
FOR 8"	6A6232-3X	6A6232-3XT
FOR 10"	6A6232-4X	6A6232-4XT
FOR 12"	6A6232-5X	6A6232-5XT

WITH 8" LIGHTS

FOR 4"	6A5232-X	6A5232-XT
FOR 5"	6A5232-1X	6A5232-1XT
FOR 8"	6A5232-3X	6A5232-3XT
FOR 10"	6A5232-4X	6A5232-4XT
FOR 12"	6A5232-5X	6A5232-5XT

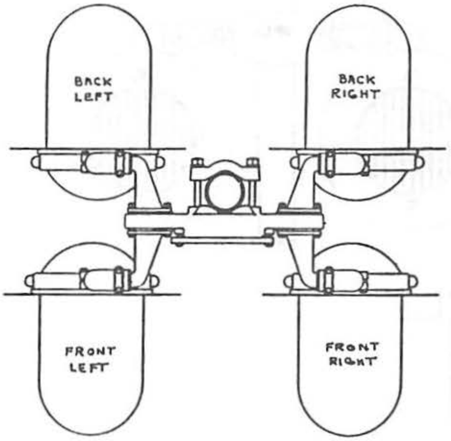
12 inch Flashing Light Signal Units are shipped with 10 volt 25 watt, and. 8" Flashing Light Signal Units are shipped with 10 volt 18 watt precision signal bulbs, factory focused.

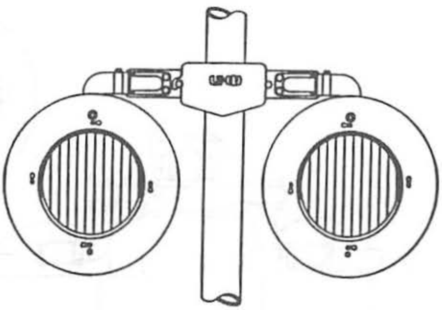
FLASHING LIGHT ASSEMBLIES

WITH JUNCTION BOX CROSSARMS

L & W Flashing light signal assemblies are shipped complete with aluminum hood, and background, pre-wired to the junction box crossarm assemblies. Lens type must be specified when ordering.

FLASHING LIGHT SIGNAL ASSEMBLY, TWO WAY:





WITH 12" LIGHTS

MAST SIZE	CLAMP TYPE BRACKETS	THREADED TYPE BRACKETS
FOR 4"	6A6215-X	6A6215-XT
FOR 5"	6A6215-1X	6A6215-1XT
FOR 8"	6A6215-3X	6A6215-3XT
FOR 10"	6A6215-4X	6A6215-4XT
FOR 12"	6A6215-5X	6A6215-5XT

WITH 8" LIGHTS

FOR 4"	6A5215-X	6A5215-XT
FOR 5"	6A5215-1X	6A5215-1XT
FOR 8"	6A5215-3X	6A5215-3XT
FOR 10"	6A5215-4X	6A5215-4XT
FOR 12"	6A5215-5X	6A5215-5XT

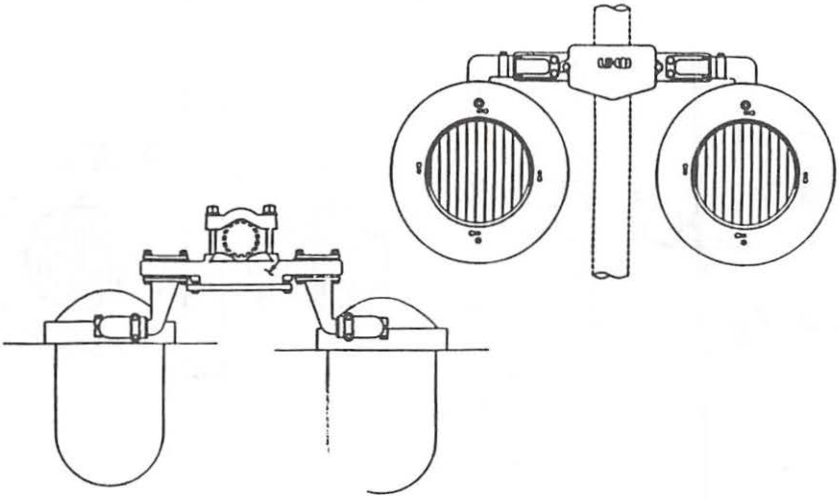
12 inch Flashing Light Signal Units are shipped with 10 volt 25 watt, and. 8" Flashing Light Signal Units are shipped with 10 volt 18 watt precision signal bulbs, factory focused.

FLASHING LIGHT ASSEMBLIES

WITH JUNCTION BOX CROSSARMS

L & W Flashing light signal assemblies are shipped complete with aluminum hood, and background, pre-wired to the junction box crossarm assemblies. Lens type must be specified when ordering.

FLASHING LIGHT SIGNAL ASSEMBLY, ONE WAY:



WITH 12" LIGHTS

MAST SIZE	CLAMP TYPE BRACKETS	THREADED TYPE BRACKETS
FOR 4"	6A6210-X	6A6210-XT
FOR 5"	6A6210-1X	6A6210-1XT
FOR 8"	6A6210-3X	6A6210-3XT
FOR 10"	6A6210-4X	6A6210-4XT
FOR 12"	6A6210-5X	6A6210-5XT

WITH 8" LIGHTS

FOR 4"	6A5210-X	6A5210-XT
FOR 5"	6A5210-1X	6A5210-1XT
FOR 8"	6A5210-3X	6A5210-3XT
FOR 10"	6A5210-4X	6A5210-4XT
FOR 12"	6A5210-5X	6A5210-5XT

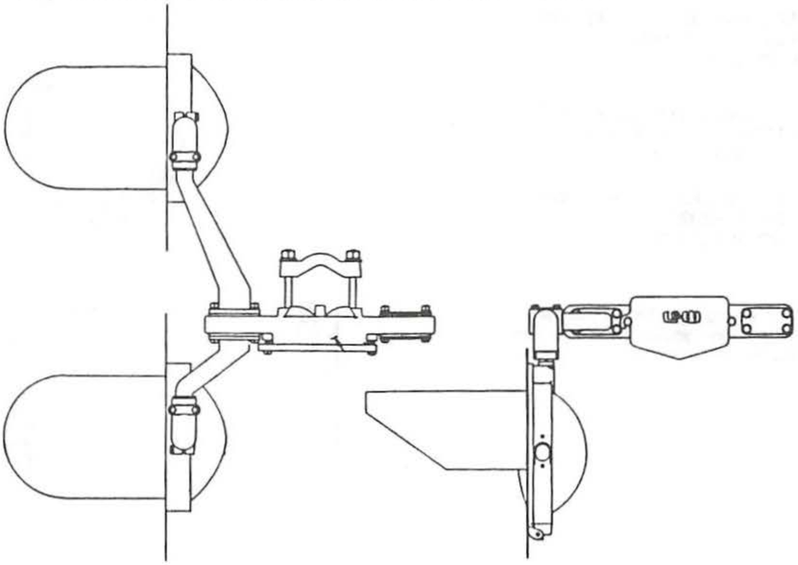
12 inch Flashing Light Signal Units are shipped with 10 volt 25 watt, and. 8" Flashing Light Signal Units are shipped with 10 volt 18 watt precision signal bulbs, factory focused.

FLASHING LIGHT ASSEMBLIES

WITH JUNCTION BOX CROSSARMS

L & W Flashing light signal assemblies are shipped complete with aluminum hood, and background, pre-wired to the junction box crossarm assemblies. Lens type must be specified when ordering.

FLASHING LIGHT SIGNAL ASSEMBLY, ONE WAY:



WITH 12" LIGHTS

MAST SIZE	CLAMP TYPE BRACKETS	THREADED TYPE BRACKETS
FOR 4"	6A6225-X	6A6225-XT
FOR 5"	6A6225-1X	6A6225-1XT
FOR 8"	6A6225-3X	6A6225-3XT
FOR 10"	6A6225-4X	6A6225-4XT
FOR 12"	6A6225-5X	6A6225-5XT

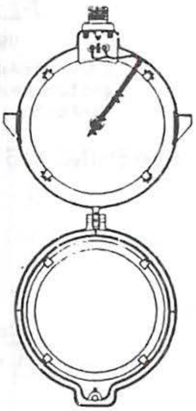
WITH 8" LIGHTS

FOR 4"	6A5225-X	6A5225-XT
FOR 5"	6A5225-1X	6A5225-1XT
FOR 8"	6A5225-3X	6A5225-3XT
FOR 10"	6A5225-4X	6A5225-4XT
FOR 12"	6A5225-5X	6A5225-5XT

12 inch Flashing Light Signal Units are shipped with 10 volt 25 watt, and. 8" Flashing Light Signal Units are shipped with 10 volt 18 watt precision signal bulbs, factory focused.

FLASHING LIGHT ASSEMBLIES

L & W Flashing light signal heads are shipped complete with aluminum hood, and background. Lens type must be specified when ordering.



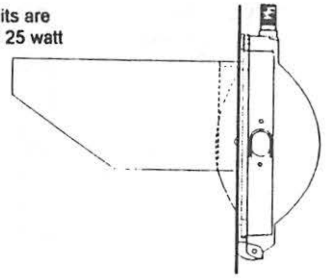
12 INCH FLASHING LIGHT SIGNAL UNIT:

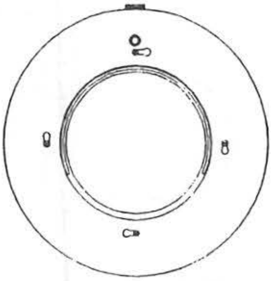
12" FLASHING LIGHT SIGNAL UNIT
WITH 30-15 LEXAN LENS
PART NO. 6B6200-X

12" FLASHING LIGHT SIGNAL UNIT
WITH 70 DEGREE LEXAN LENS
PART NO. 6B6200-1X

12" FLASHING LIGHT SIGNAL UNIT
WITH 20-32 DEGREE LENS
PART NO. 6B6200-2X

12 inch Flashing Light Signal Units are shipped with pre-focused 10 volt 25 watt precision signal bulb.



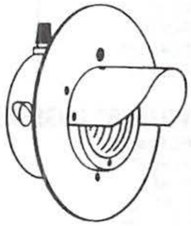


8 INCH FLASHING LIGHT SIGNAL UNIT:

8" FLASHING LIGHT SIGNAL UNIT
WITH 30-15 DEGREE LENS
PART NO. 6B5000-X

8" FLASHING LIGHT SIGNAL UNIT
WITH 70 DEGREE LENS
PART NO. 6B5000-1X

8" FLASHING LIGHT SIGNAL UNIT
WITH 20-32 DEGREE LENS
PART NO. 6B5000-2X



8 inch Flashing Light Signal Units are shipped with pre-focused 10 volt 18watt precision signal bulb.

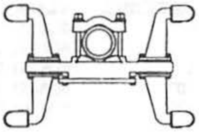
JUNCTION BOX CROSSARM ASSEMBLIES

When ordering Junction Box Crossarm Assemblies please note the arrow in each detail. This arrow indicates the direction of traffic.

TWO WAY CROSSARM ASSEMBLY

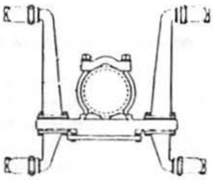
MAST SIZE	CLAMP TYPE	THREADED TYPE
4"	6D6180-X	6D6180-XT
5"	6D6180-1X	6D6180-1XT
8"	6D6180-3X	6D6180-3XT
10"	6D6180-4X	6D6180-4XT
12"	6D6180-5X	6D6160-5XT

*



TWO WAY CROSSARM ASSEMBLY

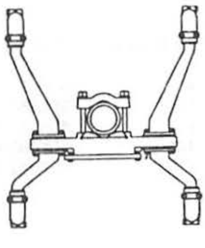
4"	6D6170-X	6D6170-XT
5"	6D6170-1X	6D6170-1XT
8"	6D6170-3X	6D6170-3XT
10"	6D6170-4X	6D6170-4XT
12"	6D6170-5X	6D6170-5XT



TWO WAY CROSSARM ASSEMBLY

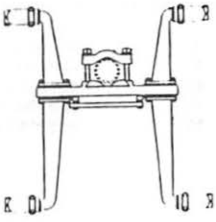
4"	6D6160-X	6D6160-XT
5"	6D6160-1X	6D6160-1XT
8"	6D6160-3X	6D6160-3X
10"	6D6160-4X	6D6160-4XT
12"	6D6160-5X	6D6160-5XT

*



TWO WAY CROSSARM ASSEMBLY

4"	6D6175-X	6D6175-XT
5"	6D6175-1X	6D6175-1XT
8"	6D6175-3X	6D6175-3XT
10"	6D6175-4X	6D6175-4XT
12"	6D6175-5X	6D6175-5XT



THREADED BRACKET CLAMP BRACKET

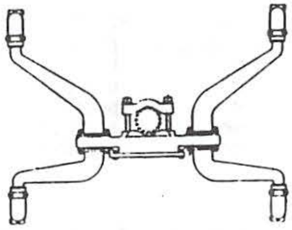
JUNCTION BOX CROSSARM ASSEMBLIES

When ordering Junction Box Crossarm Assemblies please note the arrow in each detail. This arrow indicates the direction of traffic.

TWO WAY CROSSARM ASSEMBLY

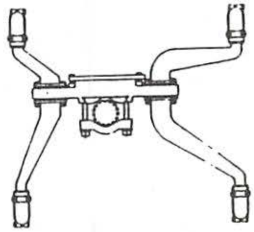
MAST SIZE	CLAMP TYPE	THREADED TYPE
4"	6D6151-X	6D6151-XT
5"	6D6151-1X	6D6151-1XT
8"	6D6151-3X	6D6151-3XT
10"	6D6151-4X	6D6151-4XT
12"	6D6151-5X	6D6151-5XT

*



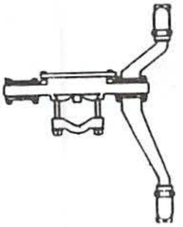
TWO WAY CROSSARM ASSEMBLY

4"	6D6150-X	6D6150-XT
5"	6D6150-1X	6D6150-1XT
8"	6D6150-3X	6D6150-3XT
10"	6D6150-4X	6D6150-4XT
12"	6D6150-5X	6D6150-5XT



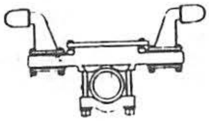
ONE WAY CROSSARM ASSEMBLY

4"	6D6060-X	6D6060-XT
5"	6D6060-1X	6D6060-1XT
8"	6D6060-3X	6D6060-3XT
10"	6D6060-4X	6D6060-4XT
12"	6D6060-5X	6D6060-5XT



ONE WAY CROSSARM ASSEMBLY

4"	6D6000-X	6D6000-XT
5"	6D6000-1X	6D6000-1XT
8"	6D6000-3X	6D6000-3XT
10"	6D6000-4X	6D6000-4XT
12"	6D6000-5X	6D6000-5XT

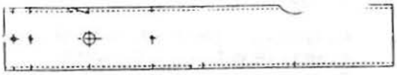


L & W INDUSTRIES

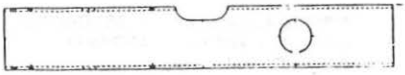
REPLACEMENT PARTS
GRADE CROSSING SIGNALS

PEDESTRIAN CROSSING SIGNAL:

SIGNAL MAST 4" X 28" LESS
BELL MOUNTING SLOT.
PART NO. 5L5180-5

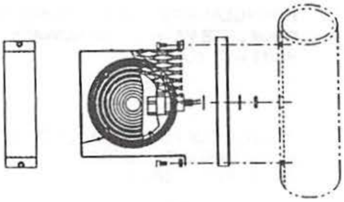


SIGNAL MAST 4" X 28" WITH
BELL MOUNTING SLOT.
PART NO. 5L5180-6

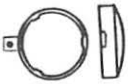


LENS GUARD ASSEMBLY
PART NO. 6A5181-X

REPLACEMENT 7" LAMP ASSEMBLY
PART NO. 6P1003-2XB



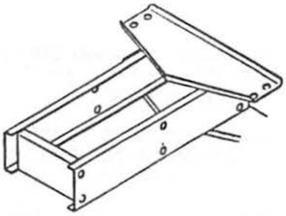
4" PINNACLE WITH LOCK HASP *
PART NO.



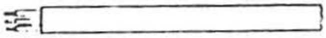
CROSSING GATEARM PARTS:

COUPLING FOR WOOD GATEARM
30 FT. OR LONGER
PART NO. 6R1831

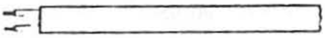
COUPLING FOR WOOD GATEARM
30 FT. OR UNDER.
PART NO. 6R1830



CORD 3 CONDUCTOR NO. 16 SJO *
PART NO. DA6640



CORD 2 CONDUCTOR NO. 16 SJ0 *
PART NO. DA6641



WIRE CLAMP 3/8" FOR SJO CORD *
PART NO. CA1775

WIRE TIE 3/16" X 4 1/2" BLACK FOR
SJO CORD. *
PART NO. 6R1606

REPLACEMENT PARTS
GRADE CROSSING SIGNALS

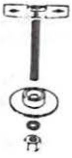
CROSSING GATEARM SECTIONS (CONT.):

FIBERGLASS REPAIR KIT, FIRST SECTION
COMPLETE WITH ALL HARDWARE.
PART NO. 6U1560-5X

FIBERGLASS REPAIR KIT, SECOND SECTION
COMPLETE WITH ALL HARDWARE.
PART NO. 6U1562-5X

FIBERGLASS REPAIR KIT, THIRD SECTION
COMPLETE WITH ALL HARDWARE.
PART NO. 6U1563-5X

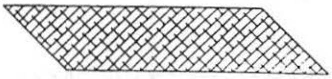
TOGGLE BOLT ASSEMBLY, FOR ALL
ADJUSTABLE GATEARMS.
PART NO. 6U1563-X



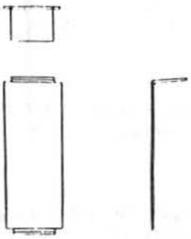
REFLECTIVE DIAGONAL STRIPE 4" X 16"
ENGINEERING GRADE WHITE TAPE. *
PART NO. 6U1098ET

REFLECTIVE DIAGONAL STRIPE 4" X 16"
HI-INTENSITY GRADE WHITE TAPE. *
PART NO. 6U1098HT

REFLECTIVE DIAGONAL STRIPE 4" X 16"
ENGINEERING GRADE RED TAPE. *
PART NO. 6U1099ET



REFLECTIVE DIAGONAL STRIPE 4" X 16"
HI-INTENSITY GRADE RED TAPE. *
PART NO. 6U1099HT



END PLUG FOR FIRST SECTION ALUMINUM
PART NO.

END PLUG FOR FIRST SECTION FIBERGLASS
PART NO.

END PLUG FOR SECOND SECTION FIBERGLASS
PART NO. 6U1585

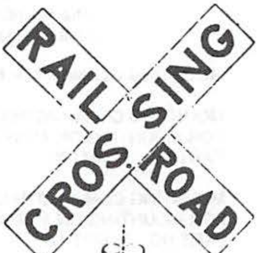
END PLUG FOR THIRD SECTION FIBERGLASS
PART NO.

SIGNS
AND MOUNTING HARDWARE

RAILROAD CROSSING SIGN:

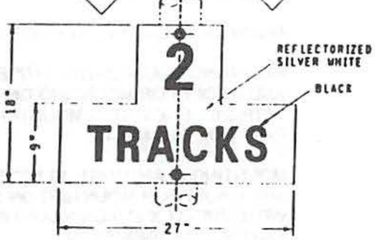
RAILROAD CROSSING SIGN ENGINEERING GRADE REFLECTIVE TAPE. LESS ALL MOUNTING HARDWARE. *
PART NO. 7A1061

RAILROAD CROSSING SIGN HI-INTENSITY GRADE REFLECTIVE TAPE. LESS ALL MOUNTING HARDWARE. *
PART NO. 7A1061H


RAILROAD
CROSSING

TRACK SIGN:

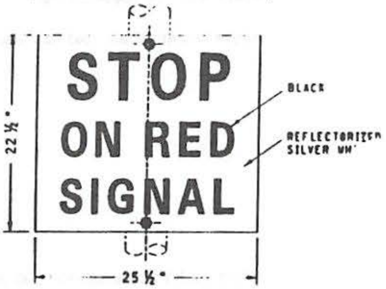
NUMBERED TRACK SIGN ENGINEERING GRADE REFLECTIVE TAPE. LESS ALL MOUNTING HARDWARE (SPECIFY NUMBER OF TRACKS)
PART NO. 7A1050


2
TRACKS
18"
9"
27"
REFLECTORIZED SILVER WHITE
BLACK

STOP ON RED SIGNAL SIGN:

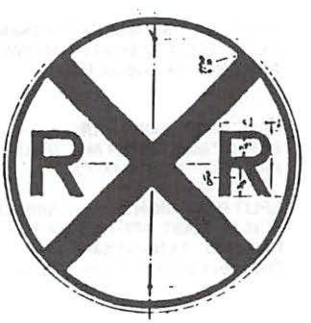
STOP ON RED SIGNAL SIGN ENGINEERING GRADE REFLECTIVE TAPE. BLACK LETTERS ON WHITE BACKGROUND. LESS ALL MOUNTING HARDWARE.
PART NO. 7A1070

STOP ON RED SIGNAL SIGN BLACK BACKGROUND WITH WHITE REFLECTIVE LETTERS. LESS ALL MOUNTING HARDWARE.
PART NO. 7A1071


STOP
ON RED
SIGNAL
22 ½"
25 ½"
BLACK
REFLECTORIZED SILVER WH

ADVANCE WARNING SIGN:

ADVANCED WARNING GRADE CROSSING SIGN. BLACK LETTERS ON YELLOW BACKGROUND. LESS ALL MOUNTING HARDWARE.
PART NO. 7A1073

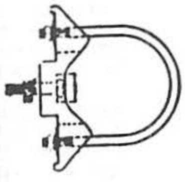


SIGNS

AND MOUNTING HARDWARE

The mounting hardware shown below is provided with hardware to mount all signs shown on the previous page.

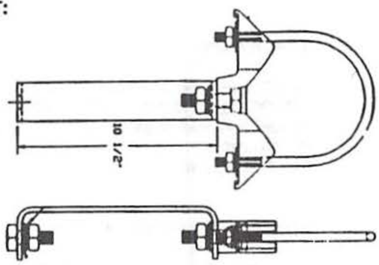
MOUNTING CLAMP WITH U'BOLT:



MOUNTING CLAMP WITH U'BOLT
FOR MOUNTING ON 4" MAST. *
PART NO. 7A1041-X

MOUNTING CLAMP WITH U'BOLT *
FOR MOUNTING ON 5" MAST.
PART NO. 7A1041-1X

MOUNTING CLAMP WITH EXTENSION AND U'BOLT:

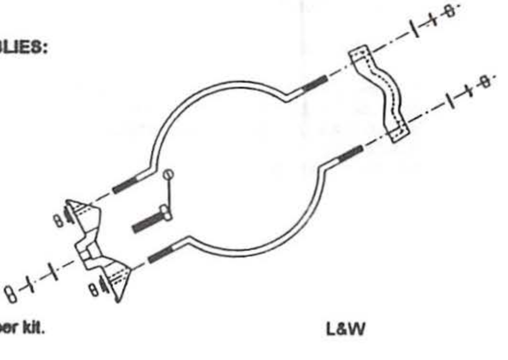


MOUNTING CLAMP WITH 10 1/2" EXTENSION
AND U'BOLT FOR MOUNTING ON 5" MAST.
WITH 5/8"- 11 X 3" SIGN MOUNTING BOLTS. *
PART NO. 7A1040-X-P2

MOUNTING CLAMP WITH 10 1/2" EXTENSION
AND U'BOLT FOR MOUNTING ON 5" MAST.
WITH 7/16"- 14 X 3" SIGN MOUNTING BOLTS. *
PART NO. 7A-1040-10X-P2

Above two items are sold as 2 each per kit.

SPLIT BOLT SIGN MOUNTING ASSEMBLIES:



SPLIT BOLT SIGN MOUNT ASSEMBLY
FOR 8" MAST WITH ALL HARDWARE.
PART NO. 7A1048-3X-P2

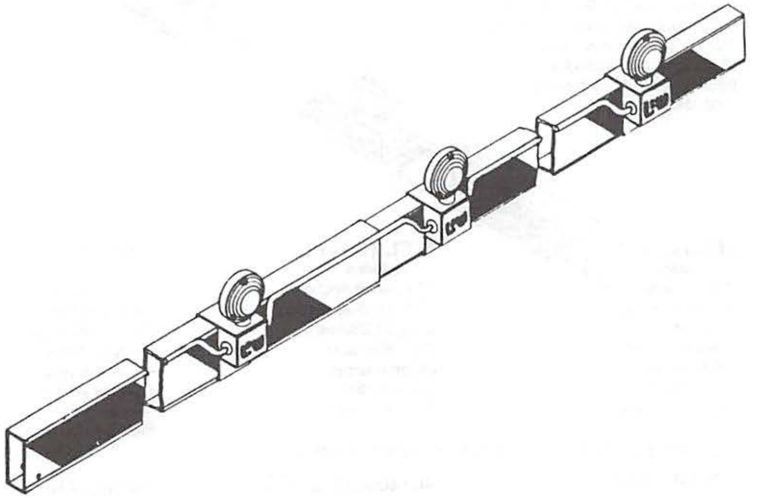
SPLIT BOLT SIGN MOUNT ASSEMBLY
FOR 10" MAST WITH ALL HARDWARE.
PART NO. 7A1048-4X-P2

SPLIT BOLT SIGN MOUNT ASSEMBLY
FOR 12" MAST WITH ALL HARDWARE.
PART NO. 7A1049-5X-P2
The above three items are sold as 2 each per kit.

L&W

AG1

ALUMINUM/FIBERGLASS GATEARM



AG1 is constructed of one section of extruded aluminum and one section of extruded fiberglass. The fiberglass section is predrilled in increments of 16" and telescopes into the aluminum base section. The gate arm can be adjusted to any desired length from 8'-16' or 16'-32'.

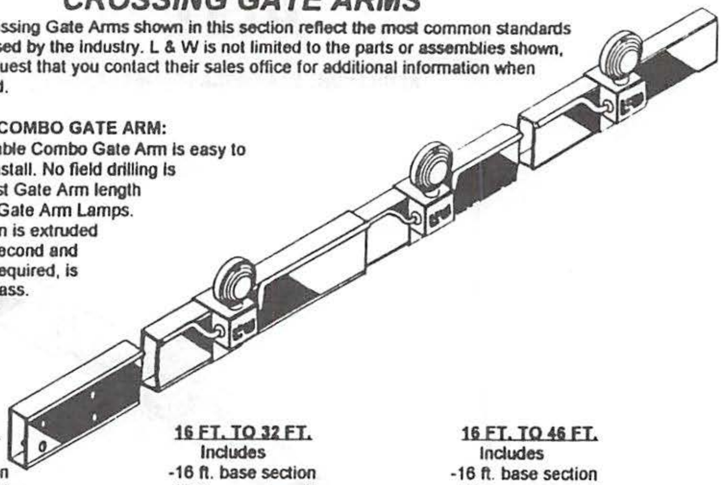
AG1 is easy to assemble. The only tools needed are small hand tools, such as, a pocket knife, terminal wrench, & a small crescent wrench. All the holes required for mounting the gate, running the wire, & adjusting the length are predrilled in the factory.

AG1 is truly a gate designed for one man assembly & installation.

CROSSING GATE ARMS

The Crossing Gate Arms shown in this section reflect the most common standards purchased by the industry. L & W is not limited to the parts or assemblies shown, and request that you contact their sales office for additional information when required.

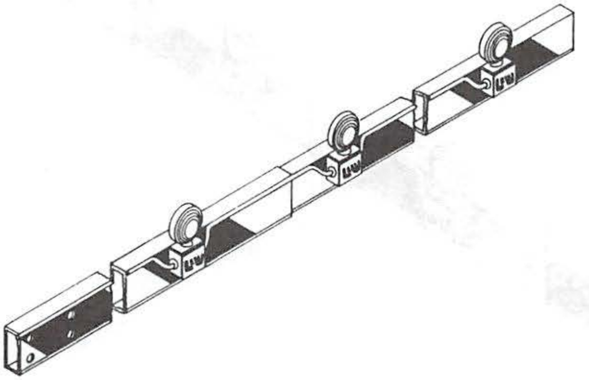
ADJUSTABLE COMBO GATE ARM:
The fully adjustable Combo Gate Arm is easy to assemble and install. No field drilling is required to adjust Gate Arm length or to mount the Gate Arm Lamps. The Base section is extruded aluminum, the second and third section, if required, is pultruded fiberglass.



8 FT. TO 16 FT.	16 FT. TO 32 FT.	16 FT. TO 46 FT.
Includes -8 ft. base section -8 ft. second section -Support sleeve -Cord and plug -(3) gate lamps -Shear bolts -Field hardware	Includes -16 ft. base section -16 ft. second section -Support Sleeve -Cord and plug -(3) gate lamps -Shear bolts -Field hardware	Includes -16 ft. base section -16 ft. second section -16 ft. third section -Support sleeve -Cord and plug -(3) gate lamps -Shear bolts -Field hardware
Engineering grade reflective tape with 4" Gate arm lamps:		
6K1400E16T4	6K1400E32T4 *	6K1400E46T4
Engineering grade reflective tape with 7" Gate arm lamps:		
6K1400E16T7	6K1400E32T7	6K1400E46T7
Hi-intensity grade reflective tape with 4" Gate arm lamps:		
6K1400H16T4	6K1400H32T4 *	6K1400H46T4
Hi-intensity grade reflective tape with 7" Gate arm lamps:		
6K1400H16T7	6K1400H32T7	6K1400H46T7
Engineering grade reflective tape less Gate arm lamps, cord and plug:		
6K1400E16T	6K1400E32T *	6K1400E46T
Hi-intensity grade reflective tape less Gate arm lamps, cord and plug:		
6K1400H16T	6K1400H32T *	6K1400H46T

FF1

FIXED
FIBERGLASS GATEARM

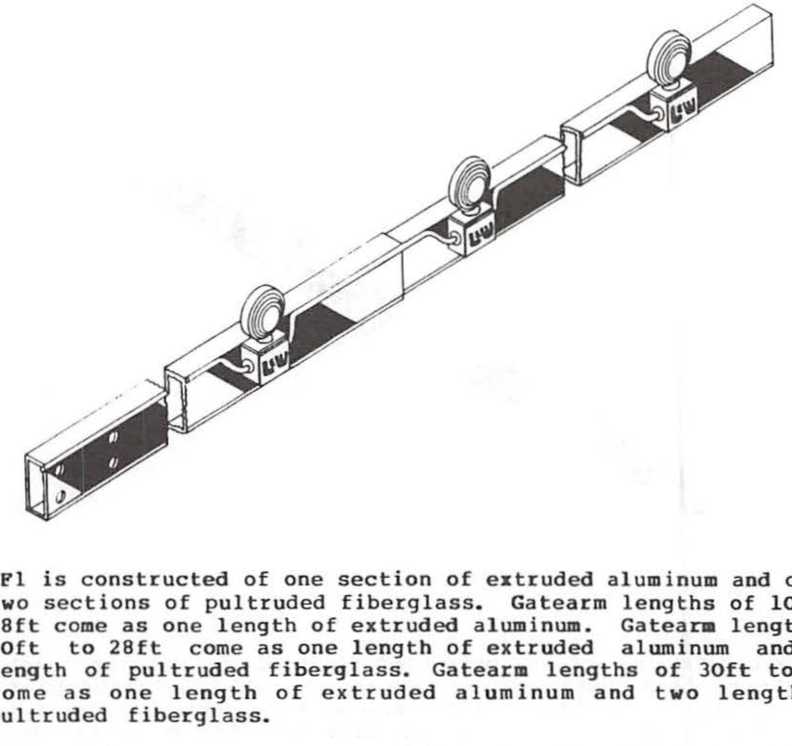


FF1 is constructed of all pultruded fiberglass. Gatearm lengths of 10ft to 18ft come as one length of pultruded fiberglass. Gatearm lengths of 20ft to 28ft come as two lengths of pultruded fiberglass. Gatearm lengths of 30ft to 38ft come as three lengths of pultruded fiberglass.

All FF1 Gatearms come assembled to length with Red and White Reflex Reflective Stripes and 4in. or 7in. diameter Gatearm Lights.

AF1

FIXED
ALUMINUM/FIBERGLASS GATEARM

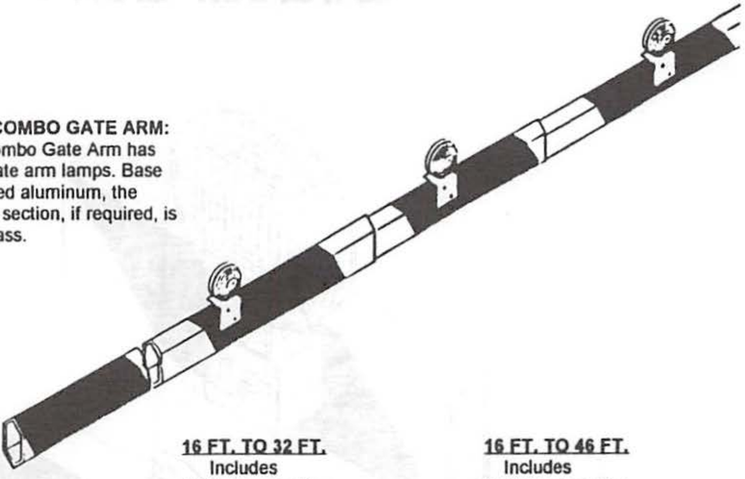


AF1 is constructed of one section of extruded aluminum and one or two sections of pultruded fiberglass. Gatearm lengths of 10ft to 18ft come as one length of extruded aluminum. Gatearm lengths of 20ft to 28ft come as one length of extruded aluminum and one length of pultruded fiberglass. Gatearm lengths of 30ft to 38ft come as one length of extruded aluminum and two lengths of pultruded fiberglass.

All AF1 Gatearms come assembled to length with Red and White Reflex Reflective Stripes and 4in. or 7in. diameter gatearm lights.

HEX GATES

ADJUSTABLE COMBO GATE ARM:
The Hexagon Combo Gate Arm has rigid mounted Gate arm lamps. Base section is extruded aluminum, the second and third section, if required, is pultruded fiberglass.



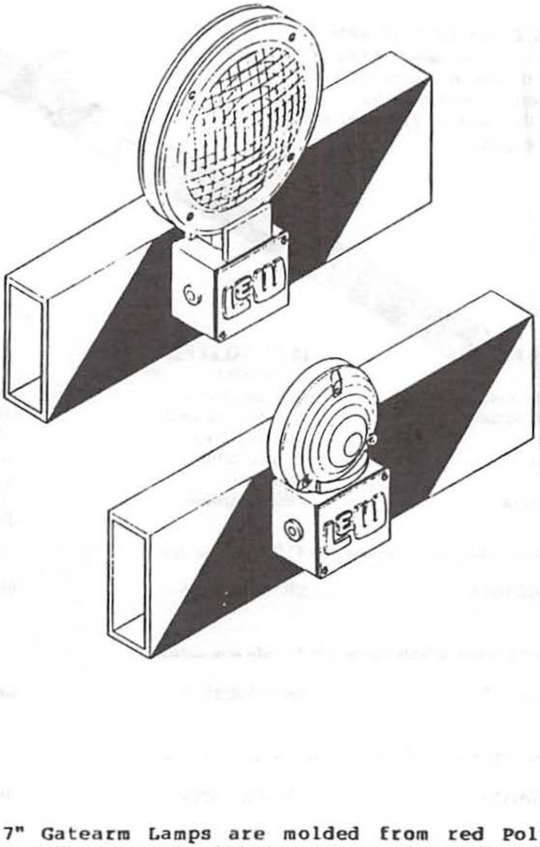
8 FT. TO 16 FT
Includes
- -8 ft. base section
- -8 ft. second section
- -Cord and plug
- -(3) gate lamps
- -Shear pin
- -Field hardware

16 FT. TO 32 FT.
Includes
- -16 ft. base section
- -16 ft. second section
- -Cord and plug
- -(3) gate lamps
- -Shear pin
- -Field hardware

16 FT. TO 46 FT.
Includes
- -16 ft. base section
- -16 ft. second section
- -Support sleeve
- -Cord and plug
- -(3) gate lamps
- -Shear pin
- -Field hardware

Engieering grade reflecive tape with 4" Gate arm lamps	6K1440E16S4	6K1440E32S4	6K1440E46S4
Engieering grade reflecive tape with 7" Gate arm lamps	6K1440E16S7	6K1440E32S7	6K1440E46S7
High Intensity grade reflecive tape with 4" Gate arm lamps	6K1440H16S4	6K1440H32S4	6K1440H46S4
High Intensity grade reflecive tape with 7" Gate arm lamps	6K1440H16S7	6K1440H32S7	6K1440H46S7
Engineering grade reflecive tape less Gate arm lamps, cord & plug	6K1440E16S	6K1440E32S	6K1440E46S
High Intensity grade reflecive tape with 4" Gate arm lamps	6K1440H16S	6K1440H32S	6K1440H46S

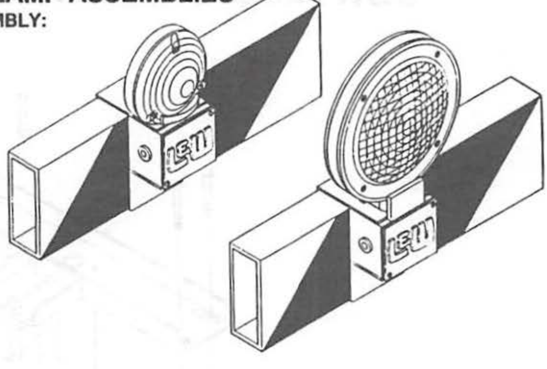
GATEARM LAMPS



L&W 4" and 7" Gatearm Lamps are molded from red Polycarbonate. This provides 360 degree visibility along with being lightweight and durable. When required a sturdy Cast Aluminum Box is provided for wire termination.

CROSSING GATE ARMS

GATE ARM LAMP ASSEMBLIES



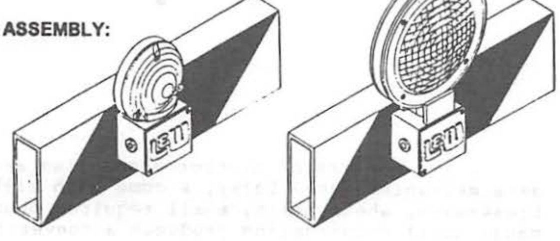
ADJUSTABLE GATE ARM LAMP ASSEMBLY:

4" ADJUSTABLE GATE ARM LAMP
WITH SLIDE BRACKET.
PART NO. 6P1030-X

7" ADJUSTABLE GATE ARM LAMP
WITH SLIDE BRACKET.
PART NO. 6P1031-X

4" ADJUSTABLE GATE ARM LAMP
WITH STAINLESS STEEL STRAP
PART NO. 6P1017-28X *

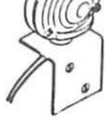
7" ADJUSTABLE GATE ARM LAMP
WITH STAINLESS STEEL STRAP.
PART NO. 6P1024-28X



RIGID MOUNT GATE ARM LAMP ASSEMBLY:

4" RIGID GATE ARM LAMP
PART NO. 6P1017-X *

7" RIGID GATE ARM LAMP
PART NO. 6P1024-X



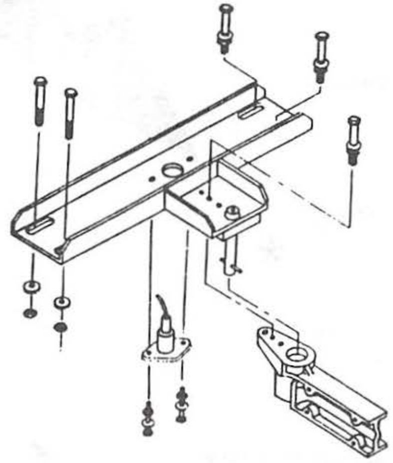
ECONOMICAL BRACKET MOUNT GATE ARM LAMP ASSEMBLY:

4" BRACKET MOUNT GATE ARM LAMP
PART NO. 6P1035-X *

7" BRACKET MOUNT GATE ARM LAMP
PART NO. 6P1036-X

Gate arm lamps are shipped with field mounting hardware, wire ties, wire nuts, and are less bulb unless otherwise specified when ordering.

CONVERSION BRACKET ASSEMBLIES



L & W conversion bracket assemblies are available for all gate mechanisms used today, & come with either cast or fabricated breakaways, shear bolts, & all required mounting hardware. Heavy gauge steel construction produces a conversion bracket assembly of high strength & long life.

CONVERSION BRACKETS
FOR CROSSING GATE ARMS

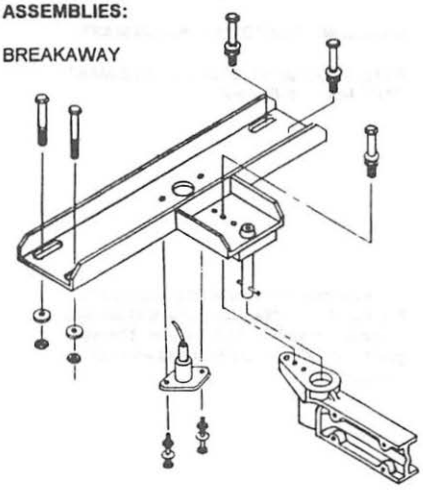
Conversion brackets and breakaways shown in this section are shipped complete with field mounting hardware, cord, receptacle, and extra shear bolts.

CONVERSION BRACKET AND BREAKAWAY ASSEMBLIES:

CONVERSION BRACKET WITH STEEL CAST BREAKAWAY
PART NO. 6R1621-X

*

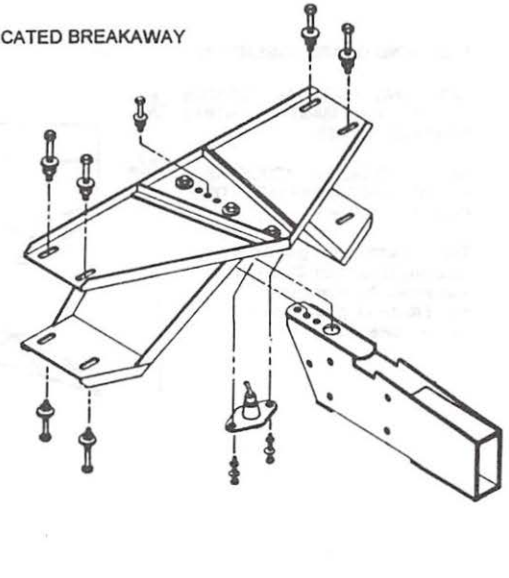
This assembly has a galvanized steel conversion bracket, painted cast breakaway. The pivot pin is plated steel and is replaceable.



CONVERSION BRACKET WITH FABRICATED BREAKAWAY
PART NO. 6R1620-X

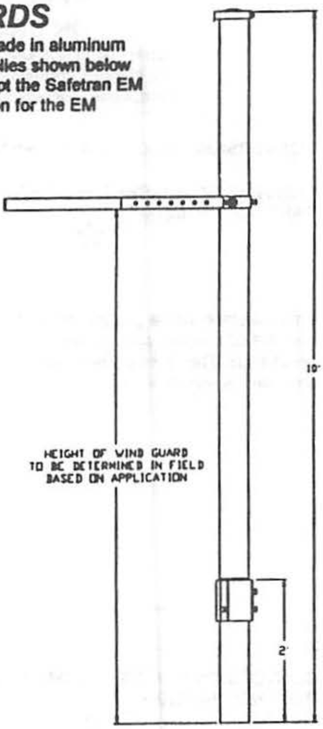
*

This assembly has a painted conversion bracket and breakaway. The hold down and pivot pins are plated steel.



HIGH WIND GUARDS

High wind guards and extension masts are made in aluminum with all stainless steel hardware. The assemblies shown below will accommodate all gate mechanisms except the Safetran EM pedestal gate. Please see the Safetran section for the EM pedestal wind guards.


10'
HEIGHT OF WIND GUARD TO BE DETERMINED IN FIELD BASED ON APPLICATION
2'

HIGH WIND GUARD EXTENSION MAST:

EXTENSION MAST 5" STUB GATE MAST
PART NO. 6U5549-X

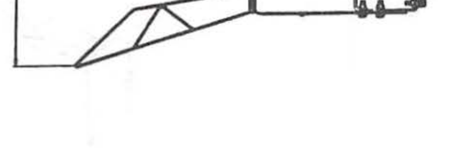
The extension mast for wind guard inserts 2 ft. into the existing stub mast, and extends your mast height 8 additional feet. The wind guard and pinnacle are included with this part number.

HIGH WIND GUARD ASSEMBLY:

HIGH WIND GUARD, ADJUSTABLE FOR 4" SIGNAL MAST MOUNTING *
PART NO. 6U5565-X

HIGH WIND GUARD, ADJUSTABLE FOR 5" SIGNAL MAST MOUNTING *
PART NO. 6U5565-1X

The Adjustable wind guard has a receiving range from 29" to 39". This allows the wind guard to adjust to the up position on the crossing gate arm.

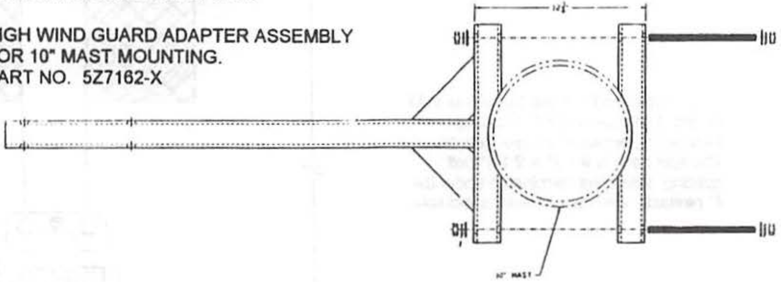


WALKOUT CANTILEVERS

Walk out cantilevers can be provided with many lengths and options. Please contact the L & W sales office for your specific Walk out cantilever ordering references.

HIGH WIND GUARD ADAPTER:

HIGH WIND GUARD ADAPTER ASSEMBLY
FOR 10" MAST MOUNTING.
PART NO. 5Z7162-X

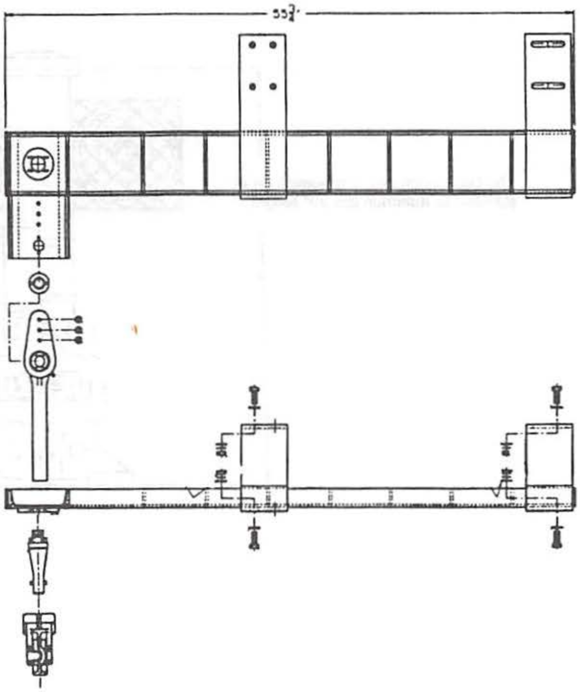


CONVERSION BRACKET ASSEMBLIES:

CONVERSION BRACKET ASSEMBLY FOR
WALKOUT CANTILEVER MAST MOUNTED
GATE MECHANISMS. 36" OFFSET, INCLUDES
ALL HARDWARE AND CAST BREAKAWAY.

RIGHT HAND OFFSET
PART NO. 6R1590-XR

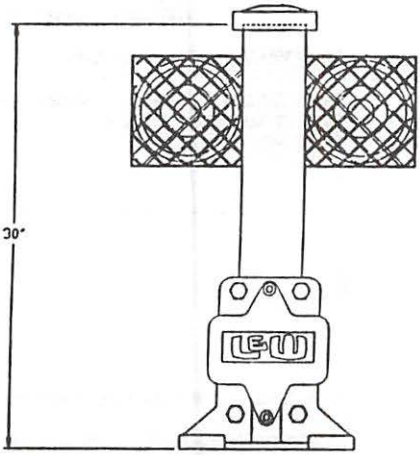
LEFT HAND OFFSET
PART NO. 6R1590-XL



PEDESTRIAN CROSSING SIGNAL

PEDESTRIAN CROSSING SIGNAL ASSEMBLIES:

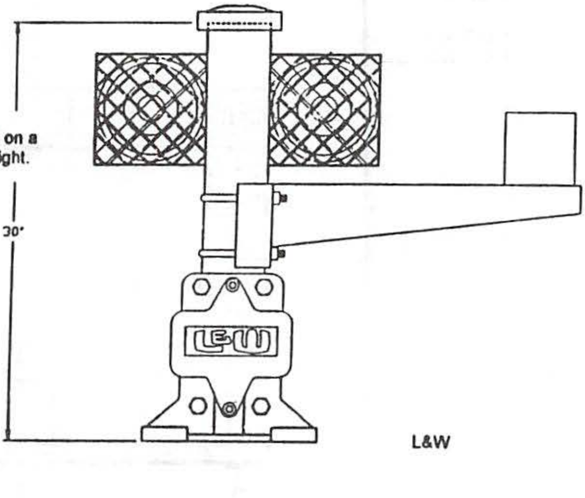
PEDESTRIAN CROSSING SIGNAL LESS BELL
PART NO: 6A5180-X



The Pedestrian Crossing signal has a 30" height. The aspect are 7" red back to back lights, enclosed in steel guards. The split base is 9 1/2" X 9 1/2" bolt spacing. Wires are terminated under the 4" pinnacle, and the pinnacle is lockable.

PEDESTRIAN CROSSING SIGNAL WITH BELL
PART NO. 6A5180-1X

The pedestrian bell is mounted on a standoff to maintain the 30" height.

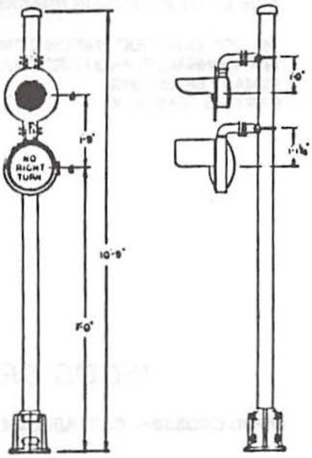


L&W

NO TURN SIGNAL

"NO TURN" SIGNAL ASSEMBLY:

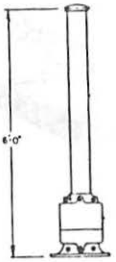
WITH SPLIT BASE, MAST, NO TURN SIGNAL, MARKER LIGHT, AND PINNACLE.
PART NO. 6A5080-X



MAST AND BASE ASSEMBLIES

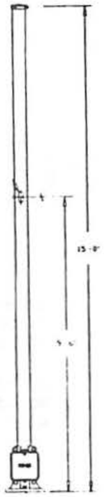
STUB MAST SIGNAL ASSEMBLY:

5" X 5' SIGNAL MAST WITH JUNCTION BOX BASE, AND PINNACLE.
PART NO. 6A5300-X



GATE MAST SIGNAL ASSEMBLY:

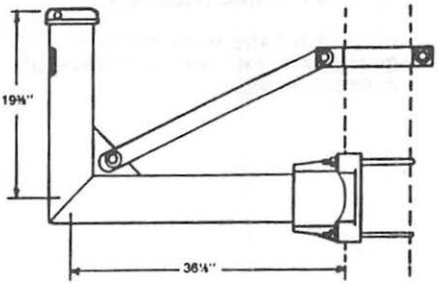
5" X 15' SIGNAL MAST WITH JUNCTION BOX BASE, AND PINNACLE.
PART NO. 6A5553-X



SIDE LIGHT EXTENSION BRACKET

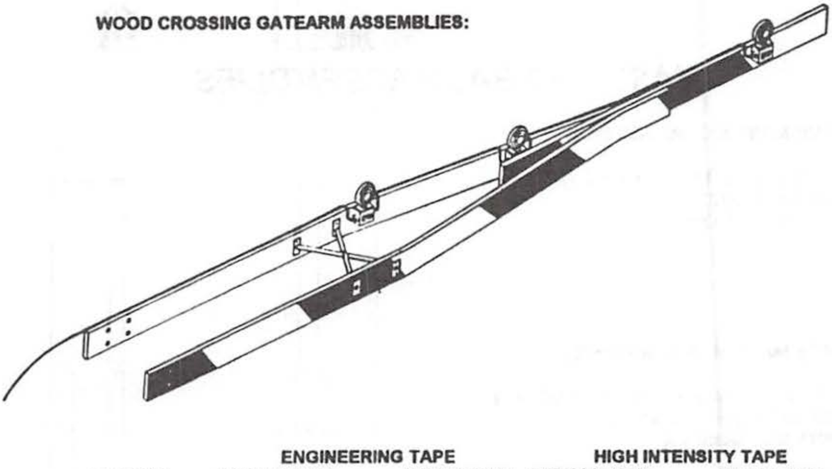
SIDE LIGHT EXTENSION BRACKET ASSEMBLY:

36" SIDE LIGHT EXTENSION COMPLETE
WITH PINNACLE, AND HARDWARE FOR
5" MAST MOUNTING.
PART NO. 6A5190-X



WOOD CROSSING GATEARMS

WOOD CROSSING GATEARM ASSEMBLIES:

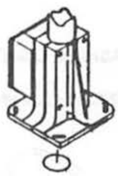


	ENGINEERING TAPE		HIGH INTENSITY TAPE	
LENGTH	WITH LIGHTS	W/O LIGHTS	WITH LIGHTS	W/O LIGHTS
14' TO 18'	6K1520-XRS	6K1500-XRS	6K1520-XHS	6K1500-XHS
19' TO 24'	6K1523-XRS	6K1503-XRS	6K1523-XHS	6K1503-XHS
25' TO 30'	6K1525-XRS	6K1505-XRS	6K1525-XHS	6K1505-XHS
30' TO 35'	6K1526-XRS	6K1506-XRS	6K1526-XHS	6K1506-XHS
36' TO 39'	6K1527-XRS	6K1507-XRS	6K1527-XHS	6K1507-XHS
40' TO 43'	6K1521-XRS	6K1511-XRS	6K1521-XHS	6K1511-XHS

REPLACEMENT PARTS

GRADE CROSSING SIGNALS

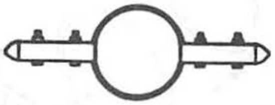
RODENT PLATES:



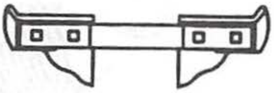
4" RODENT PLATE ALUMINUM *
PART NO. 5L5554

5" RODENT PLATE ALUMINUM *
PART NO. 5L5555

POLE STEP ASSEMBLIES:

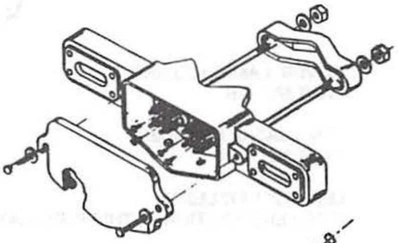


POLE STEP FOR 4" MAST
PART NO. 5L7405-X



POLE STEP FOR 5" MAST
PART NO. 5L7405-1X

JUNCTION BOX CROSSARM:

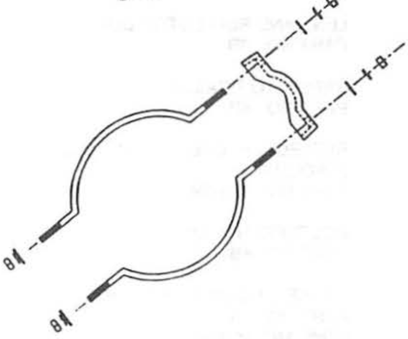


JUNCTION BOX CROSSARM ASSEMBLY
LESS ALL EXTENSIONS. WITH COVER
TERMINALS AND HARDWARE.
PART NO. 6D6001-X

COVER PLATE FOR ONE WAY CROSSARM
PART NO. 6D6006

GASKET FOR COVER PLATE AND ALL EXTENSIONS
PART NO. 6D6004-A

BACK CLAMP, CAST ALUMINUM, FOR JUNCTION
BOX CROSSARM MOUNTING. ALL MAST SIZES.
PART NO. JC6003



SPLIT BOLTS FOR MOUNTING JUNCTION BOX
CROSSARM ON 8" MAST. WITH HARDWARE.
PART NO. 6D1048-3X

SPLIT BOLTS FOR MOUNTING JUNCTION BOX
CROSSARM ON 10" MAST. WITH HARDWARE.
PART NO. 6D1048-4X

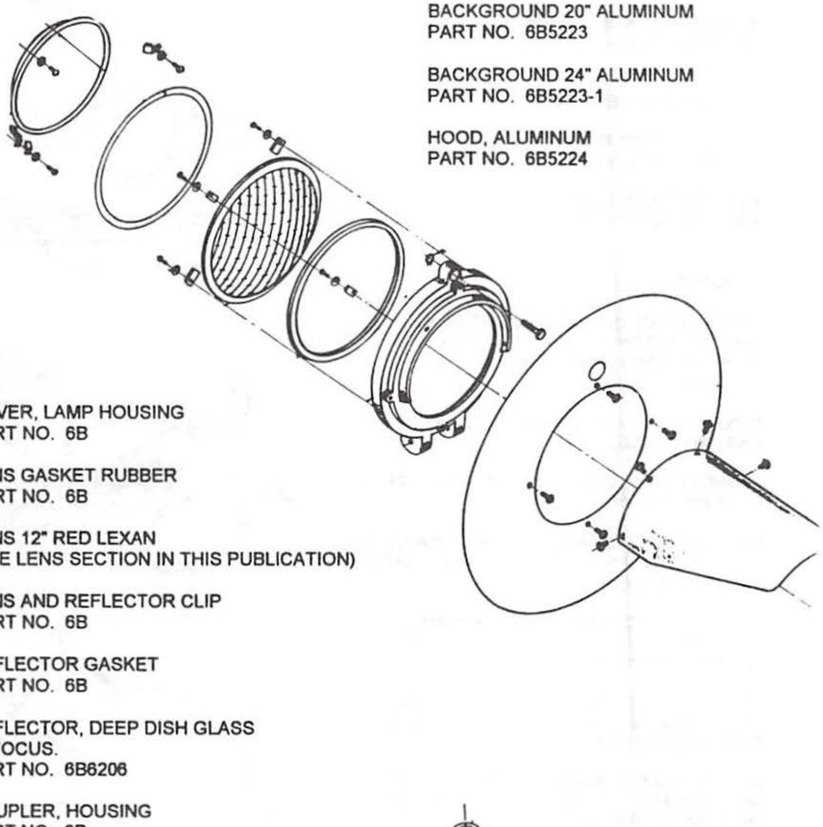
SPLIT BOLTS FOR MOUNTING JUNCTION BOX
CROSSARM ON 12" MAST. WITH HARDWARE.
PART NO. 6D1048-5X

REPLACEMENT PARTS

GRADE CROSSING SIGNALS

FLASHING LIGHT SIGNAL HEADS:

12 INCH FLASHING LIGHT SIGNAL



BACKGROUND 20" ALUMINUM
PART NO. 6B5223

BACKGROUND 24" ALUMINUM
PART NO. 6B5223-1

HOOD, ALUMINUM
PART NO. 6B5224

COVER, LAMP HOUSING
PART NO. 6B

LENS GASKET RUBBER
PART NO. 6B

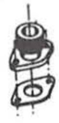
LENS 12" RED LEXAN
(SEE LENS SECTION IN THIS PUBLICATION)

LENS AND REFLECTOR CLIP
PART NO. 6B

REFLECTOR GASKET
PART NO. 6B

REFLECTOR, DEEP DISH GLASS
2" FOCUS.
PART NO. 6B6206

COUPLER, HOUSING
PART NO. 6B



GASKET, COUPLER HOUSING
PART NO. 6B
LENS AND MIRROR CLIP
PART NO. 6B

REPLACEMENT PARTS

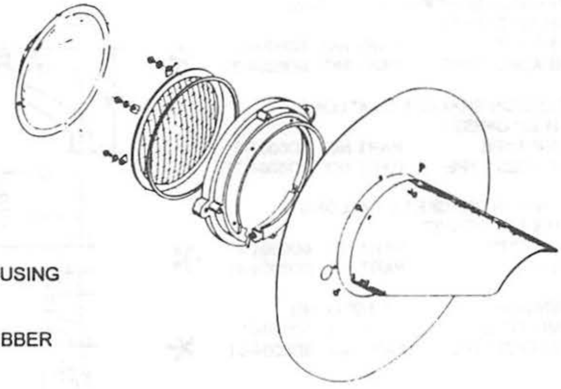
GRADE CROSS SIGNALS

FLASHING LIGHT SIGNAL HEADS:

8 INCH FLASHING LIGHT SIGNAL

BACKGROUND 20" ALUMINUM
PART NO.

8 INCH HOOD, ALUMINUM
PART NO.



COVER, LAMP HOUSING
PART NO. 6B

LENS GASKET RUBBER
PART NO.

LENS 8" RED LEXAN
(SEE LENS SECTION IN THIS PUBLICATION)

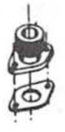
LENS AND REFLECTOR CLIP
PART NO. 6B

REFLECTOR GASKET
PART NO. 6B

REFLECTOR, GLASS
PART NO. 7C5006

COUPLER, HOUSING
PART NO. 6B

GASKET, HOUSING COUPLER
PART NO. 6B



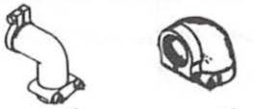
REPLACEMENT PARTS

GRADE CROSSING SIGNALS

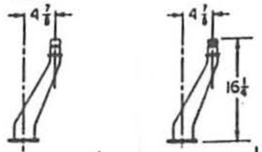
JUNCTION BOX CROSSARM (CONT.):
SUPPORT BRACKETS AND EXTENSION ARMS

CLAMP TYPE THREADED TYPE

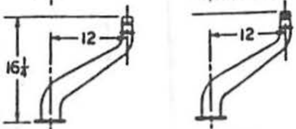
SUPPORT BRACKET WITH HARDWARE
CLAMP TYPE PART NO. 6D6005-X
THREADED TYPE PART NO. 6D6009-X
*



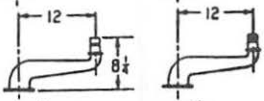
EXTENSION BRACKET 16 1/4" LONG
WITH 4 7/8" OFFSET.
CLAMP TYPE PART NO. 6D6004-1
THREADED TYPE PART NO. 6D6004-1T
*



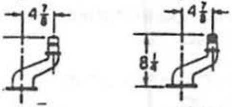
EXTENSION BRACKET 16 1/4" LONG
WITH 12" OFFSET.
CLAMP TYPE PART NO. 6D6004-2
THREADED TYPE PART NO. 6D6004-2T
*



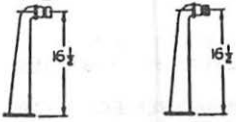
EXTENSION BRACKET 8 1/4" LONG
WITH 12" OFFSET.
CLAMP TYPE PART NO. 6D6004-3
THREADED TYPE PART NO. 6D6004-3T
*



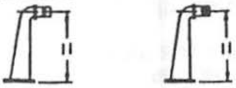
EXTENSION BRACKET 8 1/4" LONG
WITH 4 7/8" OFFSET.
CLAMP TYPE PART NO. 6D6004-4
THREADED TYPE PART NO. 6D6004-4T
*



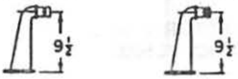
EXTENSION BRACKET 16 1/2" LONG
CLAMP TYPE PART NO. 6D6004-5
THREADED TYPE PART NO. 6D6004-5T
*



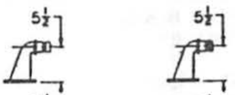
EXTENSION BRACKET 11" LONG
CLAMP TYPE PART NO. 6D6004-6
THREADED TYPE PART NO. 6D6004-6T
*



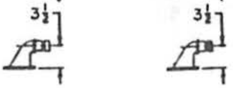
EXTENSION BRACKET 9 1/2" LONG
CLAMP TYPE PART NO. 6D6004-7
THREADED TYPE PART NO. 6D6004-7T
*



EXTENSION BRACKET 5 1/2" LONG
CLAMP TYPE PART NO. 6D6004-8
THREADED TYPE PART NO. 6D6004-8T
*



EXTENSION BRACKET 3 1/2" LONG
CLAMP TYPE PART NO. 6D6004
THREADED TYPE PART NO. 6D6004-T
*



REPLACEMENT PARTS
GRADE CROSSING SIGNALS

SIGNAL MASTS:

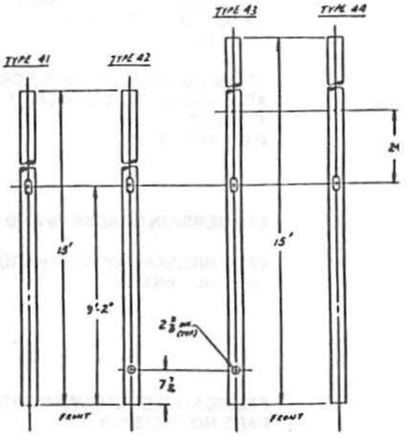
4 INCH SIGNAL MAST

4" X 13' MAST W/SLOT FOR MAIN LIGHTS AT 9'4"
LESS JUNCTION BOX BASE HOLE.
PART NO. 5L5541

4" X 13' MAST W/SLOT FOR MAIN LIGHTS AT 9'4"
WITH JUNCTION BOX BASE HOLE.
PART NO. 5L5542

4" X 15' MAST W/SLOT FOR MAIN LIGHTS AT 9'4"
AND ADDITIONAL SLOT FOR SIDE LIGHTS AT 11'4"
LESS JUNCTION BOX BASE HOLE. (SPECIFY
DEGREES OFF OF MAIN LIGHT SLOT LEFT OR
RIGHT FOR SIDE LIGHT SLOT LOCATION).
PART NO. 5L5543

4" X 15' MAST W/SLOT FOR MAIN LIGHTS AT 9'4"
AND ADDITIONAL SLOT FOR SIDE LIGHTS AT 11'4"
WITH JUNCTION BOX BASE HOLE. (SPECIFY
DEGREES OFF OF MAIN LIGHT SLOT LEFT OR
RIGHT FOR SIDE LIGHT SLOT LOCATION).
PART NO. 5L5544



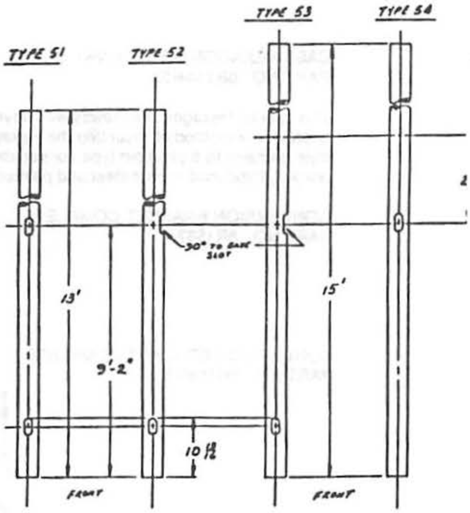
5 INCH SIGNAL MAST

5" X 13' MAST W/SLOT FOR MAIN LIGHTS AT 9'4"
LESS JUNCTION BOX BASE SLOT.
PART NO. 5L5551

5" X 13' MAST W/SLOT FOR MAIN LIGHTS AT 9'4"
WITH JUNCTION BOX BASE SLOT.
PART NO. 5L5552

5" X 15' MAST W/SLOT FOR MAIN LIGHTS AT 9'4"
AND ADDITIONAL SLOT FOR SIDE LIGHTS AT 11'4"
LESS JUNCTION BOX BASE SLOT. (SPECIFY
DEGREES OFF OF MAIN LIGHT SLOT LEFT OR
RIGHT FOR SIDE LIGHT SLOT LOCATION).
PART NO. 5L5553

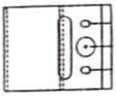
5" X 15' MAST W/SLOT FOR MAIN LIGHTS AT 9'4"
AND ADDITIONAL SLOT FOR SIDE LIGHTS AT 11'4"
WITH JUNCTION BOX BASE SLOT. (SPECIFY
DEGREES OFF OF MAIN LIGHT SLOT LEFT OR
RIGHT FOR SIDE LIGHT SLOT LOCATION)
PART NO. 5L5554



PINNACLES:

PINNACLE FOR 4" OR 5" MAST
PART NO. 5Z7500-X

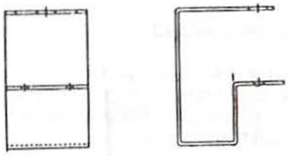
*



REPLACEMENT PARTS

GRADE CROSSING SIGNALS

GATEARM LAMPS (CONT.):



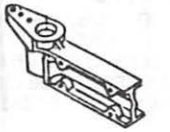
SLIDE BRACKET, FOR ADJUSTABLE
GATEARM LAMP 4" AND 7"
PART NO. 6P1031

STAINLESS STEEL STRAP, FOR
ADJUSTABLE GATEARM LAMP
4" AND 7".
PART NO. 6P

CONVERSION BRACKETS AND BREAKAWAYS:

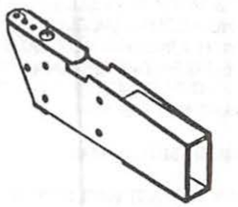
CAST BREAKAWAY WITH HARDWARE
PART NO. 6R1574-X

*



FABRICATED BREAKAWAY WITH HARDWARE
PART NO. 6R1573-X

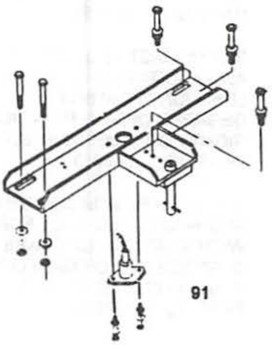
*



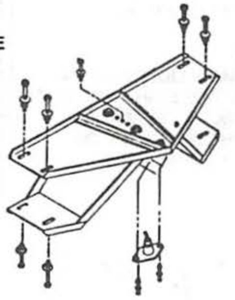
CAST HEXAGON BREAKAWAY
PART NO. 6R1584-5X

This special Hexagon Breakaway was developed to provide a method of mounting the Hexagon style gatearm to a pivot pin type conversion bracket. Produced in cast steel and painted.

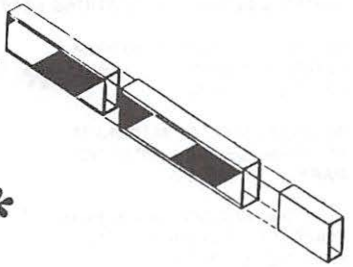
CONVERSION BRACKET COMPLETE
PART NO. 6R1587-X



CONVERSION BRACKET COMPLETE
PART NO. 6R1589-X



REPLACEMENT PARTS
GRADE CROSSING SIGNALS



CROSSING GATEARM SECTIONS:
16 FT. ALUMINUM BASE SECTION
WITH ENGINEERING GRADE TAPE.
PART NO. 6M1561E *
WITH HI-INTENSITY GRADE TAPE.
PART NO. 6M1561H

8 FT. ALUMINUM BASE SECTION
WITH ENGINEERING GRADE TAPE.
PART NO. 6M1561E-8
WITH HI-INTENSITY GRADE TAPE *
PART NO. 6M1561H-8

16 FT. FIBERGLASS FIRST SECTION
WITH ENGINEERING GRADE TAPE.
PART NO. 6M1560E
WITH HI-INTENSITY GRADE TAPE. *
PART NO. 6M1560H

8 FT. FIBERGLASS FIRST SECTION
WITH ENGINEERING GRADE TAPE
PART NO. 6M1560E-8
WITH HI-INTENSITY GRADE TAPE *
PART NO. 6M1560H-8

16 FT. FIBERGLASS SECOND SECTION
WITH ENGINEERING GRADE TAPE.
PART NO. 6M1562E
WITH HI-INTENSITY GRADE TAPE *
PART NO. 6M1562H

8 FT. FIBERGLASS SECOND SECTION
WITH ENGINEERING GRADE TAPE.
PART NO. 6M1562E-8
WITH HI-INTENSITY GRADE TAPE. *
PART NO. 6M1562H-8

16 FT. FIBERGLASS THIRD SECTION
WITH ENGINEERING GRADE TAPE. 6M1563E
PART NO.
WITH HI-INTENSITY GRADE TAPE. 6M1563H *
PART NO.

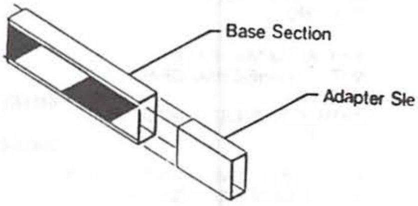
8 FT. FIBERGLASS THIRD SECTION 6M1563E-8
WITH ENGINEERING GRADE TAPE
PART NO. *
WITH HI-INTENSITY GRADE TAPE 6M1563H-8
PART NO.

For Hexagon replacement sections, refer to the U.S. & S. product section in this publication.

REPLACEMENT PARTS
GRADE CROSSING SIGNALS

CROSSING GATEARM SECTIONS (CONT.):

SUPPORT SLEEVE, ALUMINUM
FOR BASE SECTION 12" LONG. *
PART NO. 6S1564



SUPPORT SLEEVE, ALUMINUM
FOR BASE SECTION 36" LONG.
PART NO. 6S1575-3

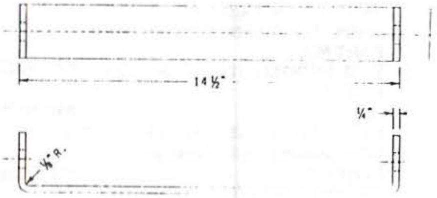
SUPPORT SECTION, ALUMINUM
FOR BASE SECTION 48" LONG.
PART NO. 6S1575-4

SUPPORT SECTION, ALUMINUM
FOR BASE SECTION 96" LONG.
PART NO. 6S1575-8

MOUNTING HARDWARE:

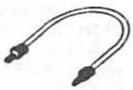
ADAPTER CLAMP CASTING
PART NO.

SIGN EXTENSION BRACKET WITH HOLE
FOR 5/8" SIGN MOUNTING BOLTS.
PART NO. 7A1042



SIGN EXTENSION BRACKET WITH HOLE
FOR 7/16" SIGN MOUNTING BOLTS.
PART NO. 7A1042-1

U' BOLT WITH HARDWARE FOR 4" MAST
PART NO. 7A1044-X



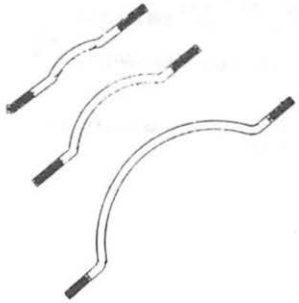
U' BOLT WITH HARDWARE FOR 5" MAST
PART NO. 7A1043-X

SPLIT BOLT FOR 6" MAST
PART NO. 7A1045

SPLIT BOLT FOR 8" MAST
PART NO. 7A1046

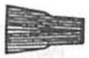
SPLIT BOLT FOR 10" MAST
PART NO. 7A1047

SPLIT BOLT FOR 12" MAST
PART NO. 7A1048



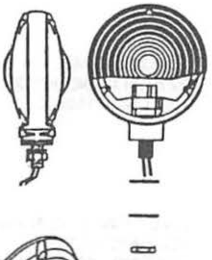
REPLACEMENT PARTS
GRADE CROSSING SIGNALS

CROSSING GATEARM PARTS (CONT.):



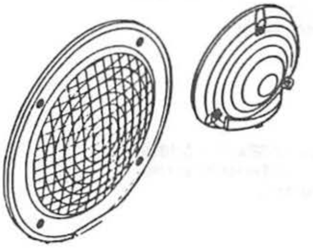
WIRE NUT, FOR SJO CORD
PART NO. 7F70236

GATEARM LAMPS:



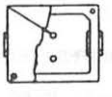
4" GATEARM LAMP ASSEMBLY *
LESS TERMINAL BOX.
PART NO. 6P1019-X

7" GATEARM LAMP ASSEMBLY
LESS TERMINAL BOX.
PART NO. 6P1003-X

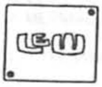


4" LENS KIT
PART NO. 6P1018 *

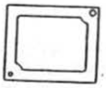
7" LENS KIT
PART NO. 6P1002



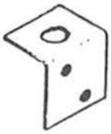
TERMINAL BOX ASSEMBLY
WITH BOX, COVER, AND HARDWARE.
CAST ALUMINUM.
PART NO. 6P1021-X



COVER, TERMINAL BOX
PART NO. 6P1005

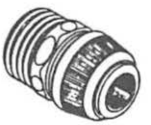


GASKET, COVER
PART NO. 6P1005A



ECONOMY "L" MOUNTING BRACKET
PART NO. 6P1035

CORD GRIP CONNECTOR 3/8" EXPANDED
WITH 1/2" NPT MOUNTING THREADS.
PART NO.



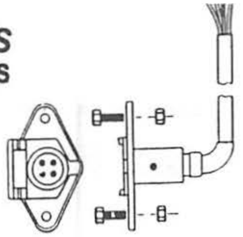
Cord Grip Connector

REPLACEMENT PARTS

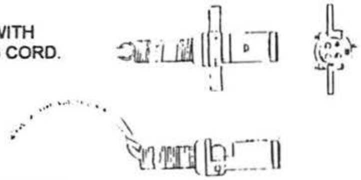
GRADE CROSSING SIGNALS

CONVERSION BRACKETS AND BREAKAWAYS (CONT.):

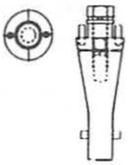
RECEPTACLE ASSEMBLY, 4 PIN
PART NO. 6R1581-X



PLUG ASSEMBLY, 4 PIN WITH
32 FT. 3 CONDUCTOR #16 CORD.
PART NO. 1589-X

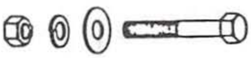


PIVOT PIN, REPLACEMENT WITH
ALL HARDWARE.
PART NO. 6R1551-X



SHEAR BOLT ASSEMBLY 5/16" x 2"
BRASS BOLT WITH HARDWARE.
PART NO. 6R1570-X

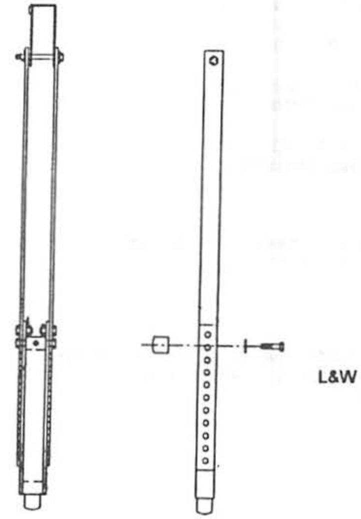
*



BUFFER LEG ASSEMBLIES:

BUFFER LEG ASSEMBLY, FOR ALL
ALUMINUM AND FIBERGLASS
GATEARMS.
PART NO. 6R1615-X

BUFFER LEG ASSEMBLY, FOR ALL
WOOD GATEARMS.
PART NO. 6R1616-X



L & W INDUSTRIES

INSTRUMENT

HOUSES-CASES

HOUSES-ALUMINUM,CORTEN,STEEL
CASES-ALUMINUM,CORTEN, STEEL
POLE MOUNT CASES
EQUIPMENT RACKS
BATTERY RACKS & TRAYS
POWER OFF LIGHTS
GROUNDING EQUIPMENT

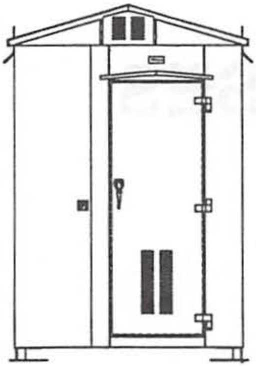
HOUSES ARE AVAILABLE WITH DROP DOWN OR STANDARD FOUNDATIONS.

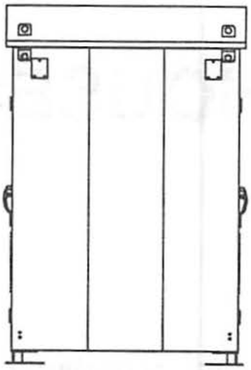
ALL STEEL HOUSES ARE POWDER COATED

C
C
C
C
C
C
C

L & W INDUSTRIES

INSTRUMENT HOUSES





STANDARD FEATURES

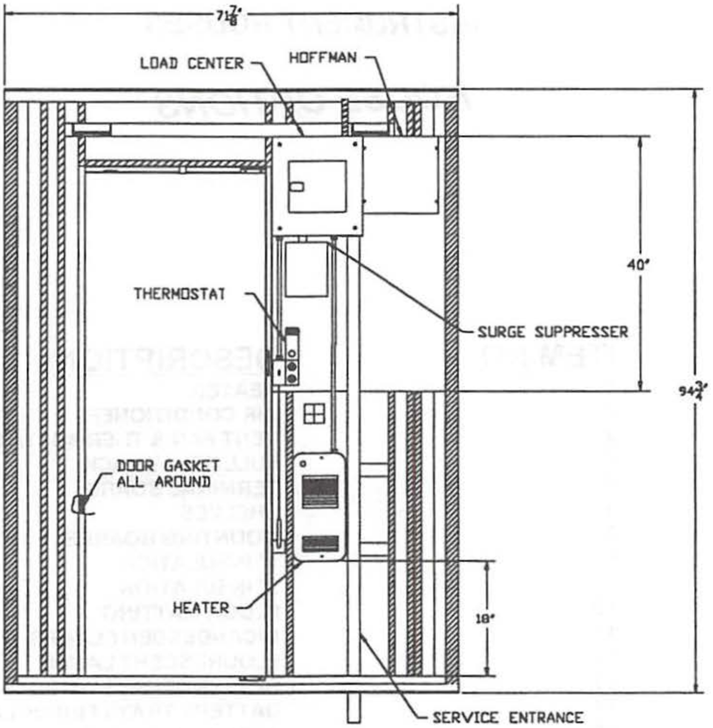
- INTERNAL ESCAPE DOOR LATCH
- PADLOCKABLE DOORS
- AERIAL KNOCKOUTS
- FULLY GASKETED DOORS
- UG CABLE KNOCKOUTS
- WIREWAYS
- PLYWOOD FLOORING
- KEYWAYS
- SCREENED FLOOR VENTS
- RAIN SHIELD OVER DOORS
- .010 ALUMINUM CONSTRUCTION
- 12 GAUGE STEEL CONSTRUCTION
- CORTEN STEEL CONSTRUCTION
- POWDER COATED PAINTING
- SCREENED DOOR AIR VENTS
- 3 POINT DOOR LATCHING
- LIFTING EYES
- INTERNAL DOOR LOCK
- GREASEABLE HINGES
- TWO PANEL DOOR CONSTRUCTION

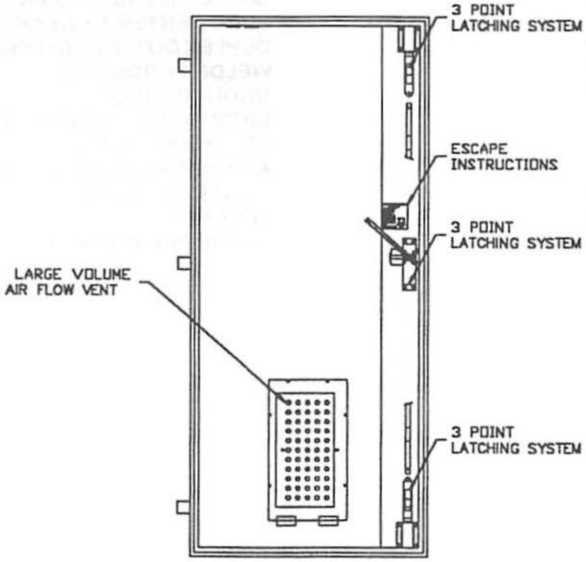
SIZES AVAILABLE

3X4 4X4 4X6
6X6 6X8 8X8
8X10 TO 8X20
10X10 TO 10X20

SPECIAL SIZES AVAILABLE

L & W INDUSTRIES


71 7/8"
LOAD CENTER
HOFFMAN
40"
THERMOSTAT
SURGE SUPPRESSER
94 3/4"
DOOR GASKET ALL AROUND
18"
HEATER
SERVICE ENTRANCE


3 POINT LATCHING SYSTEM
ESCAPE INSTRUCTIONS
3 POINT LATCHING SYSTEM
LARGE VOLUME AIR FLOW VENT
3 POINT LATCHING SYSTEM

INSTRUMENT HOUSES

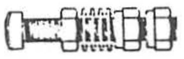
HOUSE OPTIONS

ITEM NO.	DESCRIPTION
1	HEATER
2	AIR CONDITIONER
3	VENT FAN & THERMOSTAT
4	FULL RELAY RACK
5	TERMINAL BOARD
6	SHELVES
7	MOUNTING BOARDS
8	1" INSULATION
9	2" INSULATION
10	FLOOR MATTING
11	INCANDESCENT LAMPS
12	FLOURESCENT LAMPS
13	BATTERY TRAYS WOOD
14	BATTERY TRAYS FIBERGLASS
15	AERIAL VENT KITS
16	CABLE RISERS & BUSINGS PVC
17	LOAD CENTER & BREAKERS
18	DUPLEX OUTLETS-GFI PROTECTED
19	WELDED GROUNDS
20	GROUND STUDS
21	DROP DOWN FOUNDATIONS
22	RELAY BARS & TIES
23	AERIAL CABLE OUTLET W/EYEBOLT
24	POWER OFF LIGHTS
25	TEST KEY
26	SURGE PROTECTION

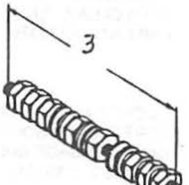
REPLACEMENT PARTS

GROUNDING EQUIPMENT (CONT.):

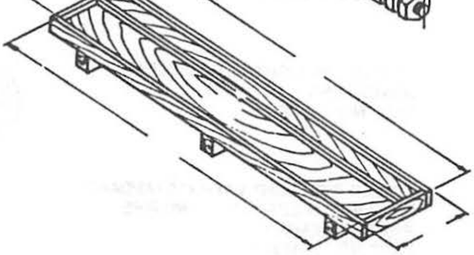
GROUND TERMINAL BOLT WITH SQUARE HEAD
INCLUDES ALL AAR TERMINAL HARDWARE.
PART NO. 9A2236-1X

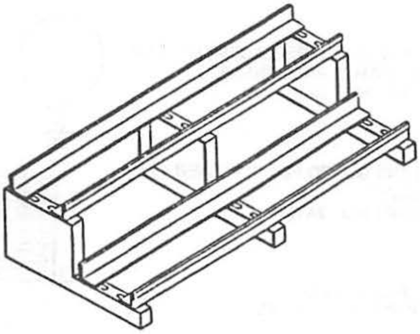


GROUND TERMINAL STUD INCLUDES ALL AAR
TERMINAL HARDWARE 3' LONG.
PART NO. 9A



BATTERY TRAYS:





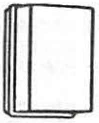
DOOR GASKET SEAL:

DOOR GASKET, FOR ALL CASES
AND HOUSES.
PART NO. JR70626

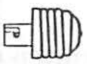
REPLACEMENT PARTS

POWER OFF INDICATION LIGHTS:

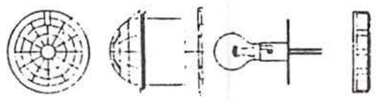
POWER OFF LIGHT , KENNEL TYPE
WITH CLEAR LENS..
PART NO. 2A70378



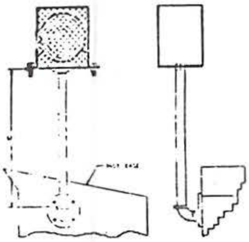
SOCKET ADAPTER FROM STANDARD
SCREW BASE SOCKET TO S-11
BAYONET BASE BULB MOUNTING.
PART NO. 2A53013



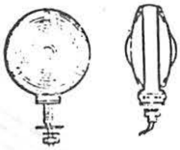
POWER OFF LIGHT WITH 3" CLEAR
JEWEL LENS.
PART NO. 2A70374



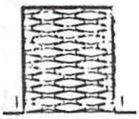
POWER OFF LIGHT WITH 4" STANDARD
LAMP WITH CLEAR LENS AND PIPE
RISER ASSEMBLY.
PART NO. 2A1670-X



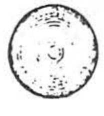
POWER OFF REPLACEMENT LAMP
4" WITH CLEAR LENSES.
PART NO. 2A1019-5X



LENS GUARD FOR 4" POWER OFF
LIGHT.
PART NO. 2A1670

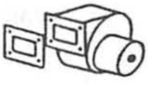


LENS, 4" CLEAR
PART NO. 7B1018C



REPLACEMENT PARTS

VENT FANS:



VENT FAN ASSEMBLY 120 CFM
FOR INSTRUMENT CASES.
PART NO. 2A51235-3

VENT FAN ASSEMBLY
FOR INSTRUMENT HOUSES.
PART NO.

THERMOSTAT:

TEMPERATURE CONTROL THERMOSTAT
PART NO. 2A51238

HEATERS:

220 VOLT HEATER RECOMMENDED
FOR 3 X 4, THRU 6 X 8 INSTRUMENT
HOUSES.
PART NO. 2A70228

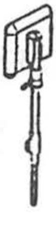
220 VOLT HEATER RECOMMENDED
FOR INSTRUMENT HOUSES 8 X 8
AND OVER.
PART NO. 2A70229

FLOOR MATTING:

DIAMOND GRIP RUBBER FLOOR
MATTING 48" X SPECIFIED LENGTH.
PART NO. JT53090-### (INCHES)

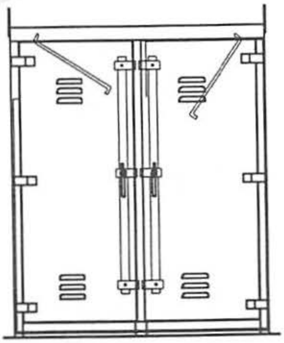
GROUNDING EQUIPMENT:

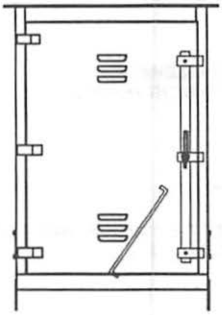
WELDED GROUND FOR ALL ALUMINUM
INSTRUMENT CASES AND HOUSES.
PART NO. FA855C1G48



INSTRUMENT CASES

AVAILABLE IN ALUMINUM, POWDER COATED STEEL AND CORTEN.





STANDARD FEATURES

VENTED DOORS
3 POINT DOOR LATCHING
GREASABLE HINGES
UG CABLE KNOCKOUTS
AERIAL CABLE KNOCKOUTS

OPTIONS

BACKBOARD
RELAY BARS
SHELVES
LIGHTING
INSULATION
GROUNDING

SIZES AVAILABLE

41" HI & LOW
60" HIGH & LOW
81 HIGH & LOW
116" LOW

L & W INDUSTRIES

TERMINAL

BOXES

PEDESTAL MOUNTED TERMINAL BOXES
FLUSH MOUNTED TERMINAL BOXES
POLE MOUNTED TERMINAL BOXES
REPLACEMENT PARTS

TERMINAL BOXES

PEDESTAL MOUNTED

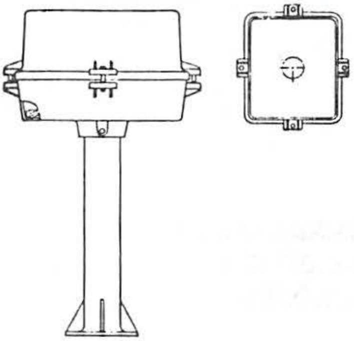
7000 SERIES TERMINAL BOXES:

The 7000 series terminal boxes are produced from all quality cast aluminum. The Overall height of the assembly is 29". The dimensions off the terminal box are:

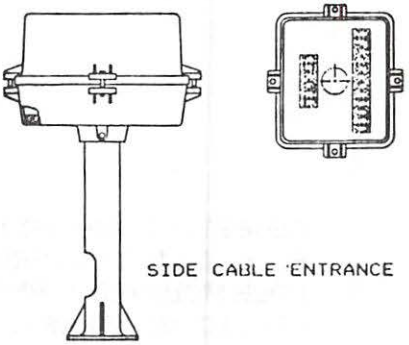
height = 10 1/2"
width = 11"
length = 13"

In this section we have shown only a few assemblies available. The 7000 series terminal boxes can be arranged to meet your requirements. Please contact our sales department for proper ordering information.

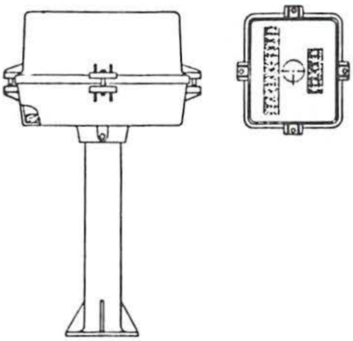
TERMINAL BOX LESS ALL TERMINALS, AND LESS ALL SIDE DRILLING. TERMINAL MOUNTING BOARD INCLUDED.
PART NO. 3A7000-10X



TERMINAL BOX WITH 48 TERMINAL POST, AND LESS ALL SIDE DRILLINGS. WITH SIDE CABLE ACCESS ON THE PEDESTAL.
PART NO. 3A7000-1X



TERMINAL BOX WITH 48 TERMINAL POST, AND LESS ALL SIDE DRILLING.
PART NO. 3A7000-X



TERMINAL BOXES

PEDESTAL MOUNTED

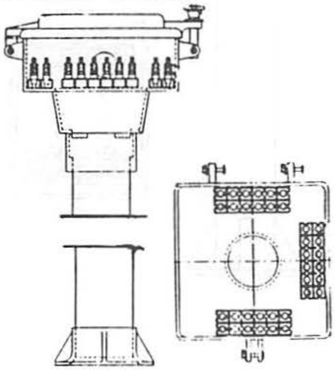
7005 SERIES TERMINAL BOXES:

The 7005 series terminal boxes are produced from all quality cast aluminum. The Overall height of the assembly is 31 1/2". The dimensions off the terminal box are:

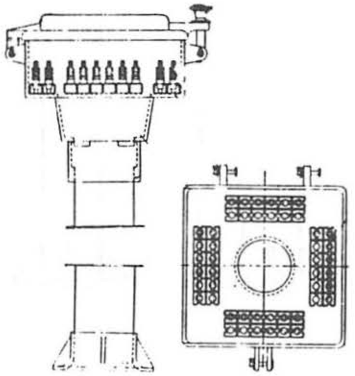
height = 7 1/2"
width = 11 3/4"
length = 11 3/4"

In this section we have shown only a few assemblies available. The 7005 series terminal boxes can be arranged to meet your requirements. Please contact our sales department for proper ordering information.

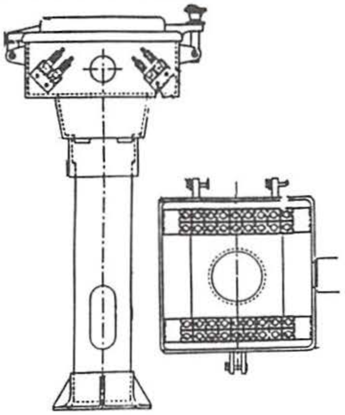
TERMINAL BOX WITH 36 TERMINAL POSTS, AND WITH SIDE DRILLING FOR 1 1/2" OR 2" N.P.T. FITTING.
PART NO. 3A7005-X



TERMINAL BOX WITH 36 TERMINAL POSTS, AND LESS ALL SIDE DRILLING.
PART NO. 3A7005-6X



TERMINAL BOX WITH 36 TERMINAL POSTS, AND WITH SIDE DRILLING FOR 1 1/2" OR 2" N.P.T. FITTING. SIDE CABLE ACCESS PEDESTAL..
PART NO. 3A7005-3X



TERMINAL BOX WITH 48 TERMINAL POSTS, AND LESS ALL SIDE DRILLINGS.
PART NO. 3A7005-1X

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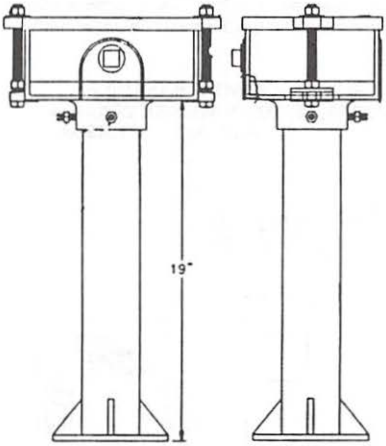
NOT SHOWN
=============

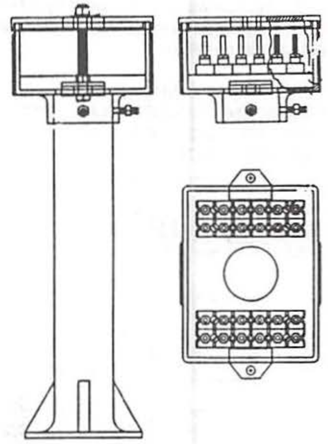
TERMINAL BOXES

PEDESTAL MOUNTED

TERMINAL BOX LESS ALL TERMINAL POSTS AND WITH SIDE DRILLING FOR 1 1/2" N.P.T. FITTING. SHIPPED COMPLETE WITH 1 1/2" PIPE PLUG. TERMINAL BOARD INCLUDED.
PART NO. 3A7100-53X



TERMINAL BOX WITH 24 TERMINAL POSTS, AND LESS ALL SIDE DRILLINGS.
PART NO. 3A7100-20X



TERMINAL BOXES

PEDESTAL MOUNTED

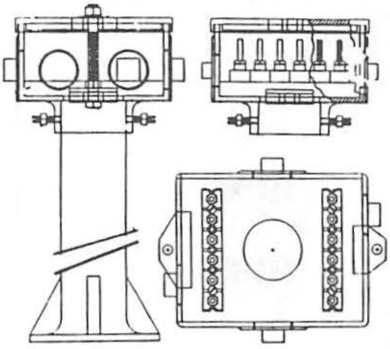
7100 SERIES TERMINAL BOXES:

The 7100 series terminal boxes are produced from all quality cast aluminum. The Overall height of the assembly is 23". The dimensions off the terminal box are:

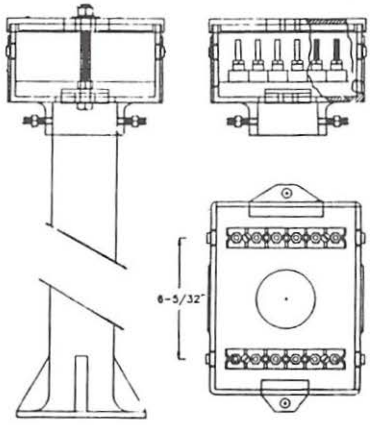
height = 4"
width = 7"
length = 9 1/4"

In this section we have shown only a few assemblies available. The 7100 series terminal boxes can be arranged to meet your requirements. Please contact our sales department for proper ordering information.

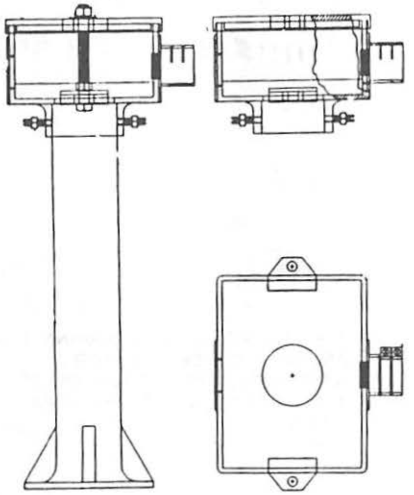
TERMINAL BOX WITH 12 TERMINAL POSTS, AND WITH (4) SIDE DRILLINGS FOR 1 1/2" N.P.T. FITTINGS. ONE ON EACH SIDE.
PART NO. 3A7100-14X



TERMINAL BOX WITH 12 TERMINAL POST, AND WITH (4) SIDE DRILLINGS FOR 3/4" N.P.T. FITTINGS. (2) EACH DRILLED ON OPPOSITE SIDES.
PART NO. 3A7100-8X



TERMINAL BOX LESS ALL TERMINALS AND WITH SIDE DRILLINGS FOR 1 1/2" N.P.T. FITTING. WITH 1 1/2" FLEX CONDUIT FITTING. TERMINAL BOARD INCLUDED.
PART NO. 3A7100-1X



L & W INDUSTRIES

TERMINAL BOXES

PEDESTAL MOUNTED

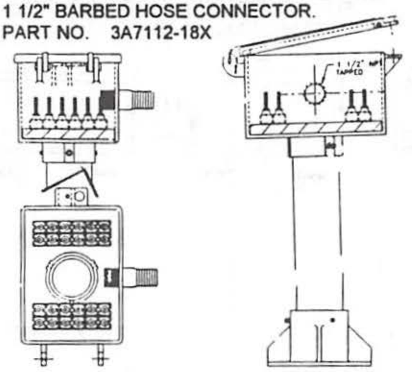
7112 SERIES TERMINAL BOXES:

The 7112 series terminal boxes are produced from all quality cast aluminum. The Overall height of the assembly is 25". The dimensions off the terminal box are:

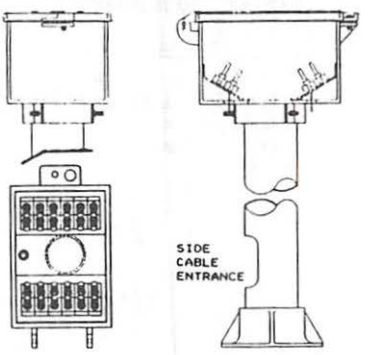
height = 6 1/4"
width = 7 1/4"
length = 10 1/4"

In this section we have shown only a few assemblies available. The 7112 series terminal boxes can be arranged to meet your requirements. Please contact our sales department for proper ordering information.

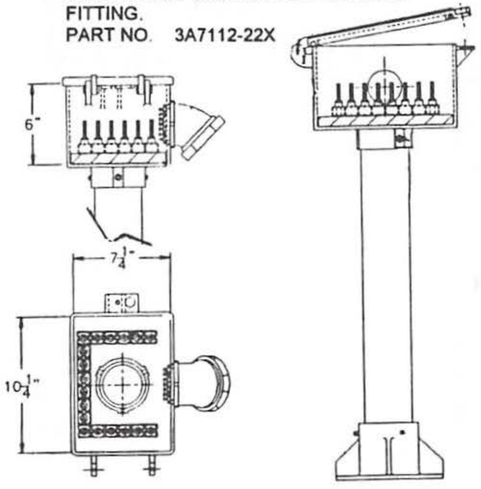
TERMINAL BOX WITH 24 TERMINAL POSTS, AND WITH SIDE DRILLING FOR 1 1/2" N.P.T. FITTING. SHIPPED COMPLETE WITH 1 1/2" BARBED HOSE CONNECTOR.
PART NO. 3A7112-18X



TERMINAL BOX WITH 24 TERMINAL POSTS, AND LESS SIDE DRILLINGS. SIDE CABLE ACCESS IN PEDESTAL.
PART NO. 3A7112-13X



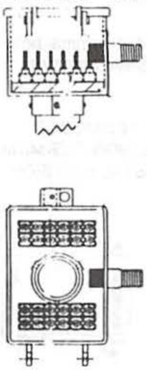
TERMINAL BOX WITH 18 TERMINAL POST, AND WITH SIDE DRILLING FOR 2" N.P.T. FITTING. SHIPPED COMPLETE WITH 45 DEGREE 2" LIQUID TIGHT CONDUIT FITTING.
PART NO. 3A7112-22X

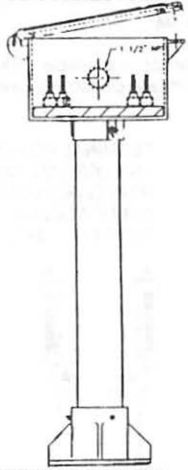


TERMINAL BOXES

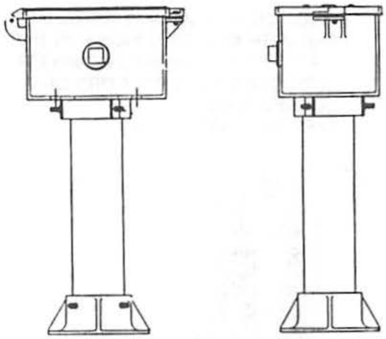
PEDESTAL MOUNTED

TERMINAL BOX WITH 24 TERMINAL POSTS, AND WITH SIDE DRILLING FOR 1 1/2" N.P.T. FITTING. SHIPPED COMPLETE WITH 1 1/2" N.P.T. BARBED HOSE CONNECTOR.
PART NO. 3A7112-20X

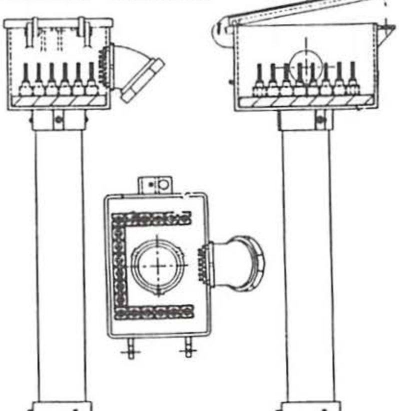




TERMINAL BOX LESS ALL TERMINAL POSTS, AND WITH SIDE DRILLING FOR 1 1/2" N.P.T. FITTING. SHIPPED WITH 1 1/2" PIPE PLUG.
NO TERMINAL BOARD INCLUDED.
PART NO. 3A7112-12X



TERMINAL BOX WITH 18 TERMINAL POSTS, AND WITH SIDE DRILLING FOR 2 1/2" N.P.T. FITTING. SHIPPED COMPLETE WITH 2 1/2" N.P.T. 45 DEGREE LIQUID TIGHT CONDUIT FITTING.
PART NO. 3A7112-21X



TERMINAL BOXES

PEDESTAL MOUNTED

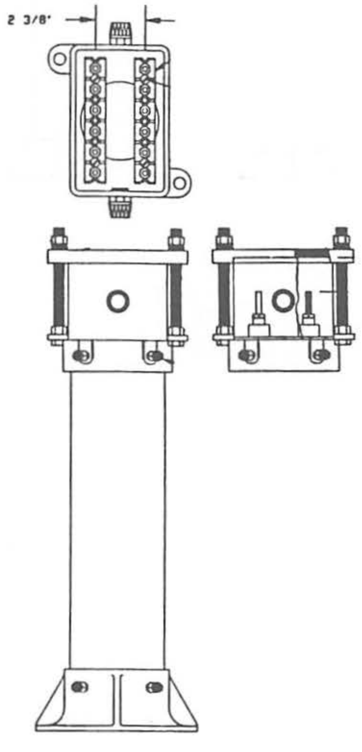
7200 SERIES TERMINAL BOXES:

The 7200 series terminal boxes are produced from all quality cast aluminum. The Overall height of the assembly is 23". The dimensions off the terminal box are:

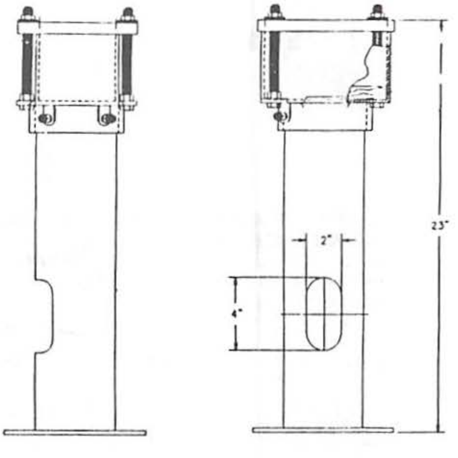
height = 3 3/4"
width = 4 3/4"
length = 7"

In this section we have shown only a few assemblies available. The 7200 series terminal boxes can be arranged to meet your requirements. Please contact our sales department for proper ordering information.

TERMINAL BOX WITH 12 TERMINALS, AND WITH SIDE DRILLINGS FOR 1/2" N.P.T. FITTING. SHIPPED COMPLETE WITH (2) EA. 1/2" N.P.T. CORD GRIP CONNECTORS.
PART NO. 3A7200-15X



TERMINAL BOX LESS ALL TERMINALS, AND LESS ALL SIDE DRILLINGS. TERMINAL BOARD INCLUDED. PEDESTAL HAS SIDE CABLE ACCESS.
PART NO. 3A7200-9X



TERMINAL BOXES

PEDESTAL MOUNTED

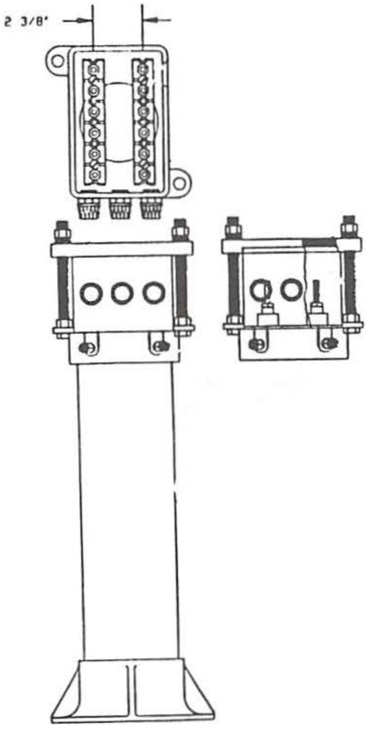
7300 SERIES TERMINAL BOXES:

The 7300 series terminal boxes are produced from all quality cast aluminum. The Overall height of the assembly is 23". The dimensions off the terminal box are:

height = 3 3/4"
width = 4 3/4"
length = 7"

In this section we have shown only a few assemblies available. The 7300 series terminal boxes can be arranged to meet your requirements. Please contact our sales department for proper ordering information.

TERMINAL BOX WITH 12 TERMINALS,
AND WITH SIDE DRILLINGS FOR (3) 1/2"
N.P.T. FITTING. SHIPPED COMPLETE
WITH (3) EA. 1/2" N.P.T. CORD GRIP
CONNECTORS.
PART NO. 3A7302-6X



TERMINAL BOXES

FLUSH MOUNTED

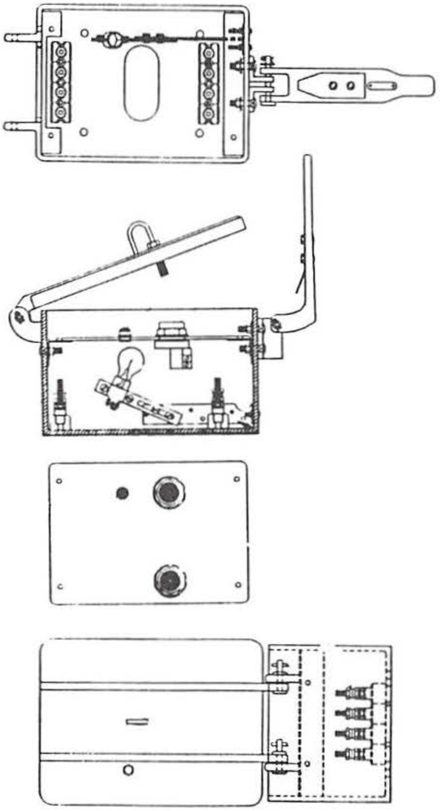
7112 SERIES TERMINAL BOXES:

The 7112 series terminal boxes are produced from all quality cast aluminum. The box is designed for flush wall mounting, and is water resistant. This box is also used as a push button release assembly. The dimensions off the terminal box are:

height = 6 1/4"
width = 7 3/4"
length = 10 3/4"

In this section we have shown only a few assemblies available. The 7112 series terminal boxes can be arranged to meet your requirements. Please contact our sales department for proper ordering information.

TERMINAL BOX WITH 8 TERMINAL POSTS, AND LESS ALL SIDE DRILLING. WITH TWO N.O. AND N.C. PUSH BUTTON CONTROLS, LIGHT INDICATION, AND RED JEWEL.
PART NO. 3A7112-15X



TERMINAL BOX WITH 4 TERMINAL POSTS, AND LESS ALL SIDE DRILLINGS. WITH ONE N.O. AND N.C. PUSH BUTTON CONTROL. WITH LIGHT INDICATION AND RED JEWEL.
PART NO. 3A7112-16X

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==============
  NOT  SHOWN
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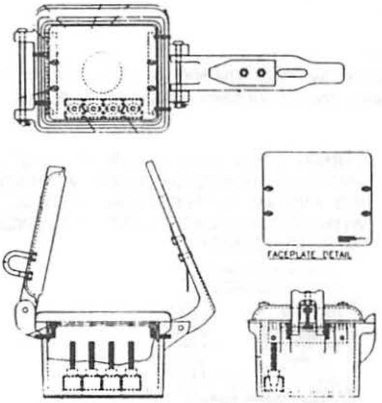
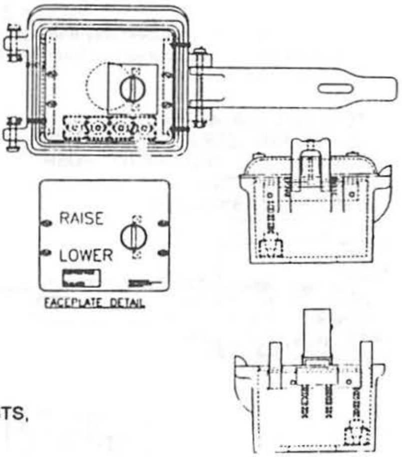
TERMINAL BOXES
FLUSH MOUNTED

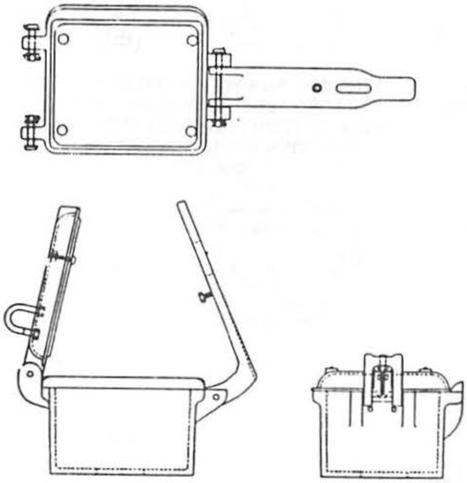
TERMINAL BOX WITH 4 TERMINAL POSTS, AND LESS ALL SIDE DRILLING.
PART NO. ZB8000-1X


FACEPLATE DETAIL

TERMINAL BOX WITH 4 TERMINAL POSTS, AND LESS ALL SIDE DRILLING. WITH ONE N.O. AND N.C. PUSH BUTTON INCLUDING SAFETY SWITCH LEVER.
PART NO. ZB8000-4X


RAISE
LOWER
FACEPLATE DETAIL

TERMINAL BOX LESS ALL TERMINAL POSTS, AND LESS ALL SIDE DRILLING.
PART NO. ZB8026-X



L & W INDUSTRIES

TERMINAL BOXES

FLUSH MOUNTED

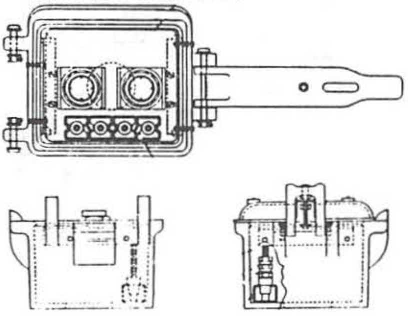
8000 SERIES TERMINAL BOXES:

The 8000 series terminal boxes are produced from all quality cast aluminum. The box is designed for flush wall mounting, and is water resistant. This box is also used as a push button release assembly. The dimensions off the terminal box are:

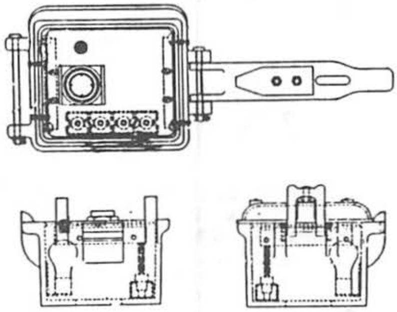
height = 3 1/2"
width = 4"
length = 6 1/4"

In this section we have shown only a few assemblies available. The 8000 series terminal boxes can be arranged to meet your requirements. Please contact our sales department for proper ordering information.

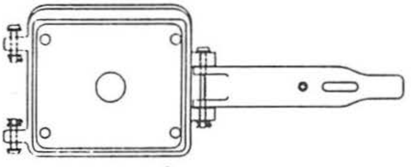
TERMINAL BOX WITH 4 TERMINAL POSTS, AND LESS ALL SIDE DRILLING. WITH ONE N.O. AND ONE N.C. PUSH BUTTON CONTROL.
PART NO. ZB8000-20X

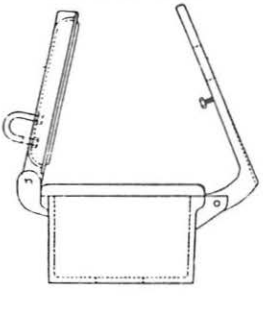


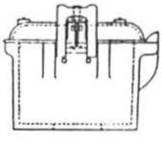
TERMINAL BOX WITH 4 TERMINAL POST, AND LESS ALL SIDE DRILLINGS. WITH ONE N.O. AND N.C. PUSH BUTTON CONTROL. WITH LIGHT INDICATION AND RED JEWEL.
PART NO. ZB8024-X



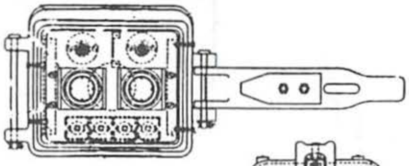
TERMINAL BOX LESS ALL TERMINAL POSTS, AND LESS ALL SIDE DRILLING.
PART NO. ZB8000-X

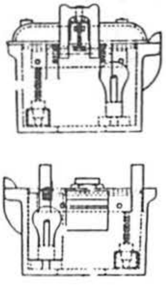






TERMINAL BOX WITH 4 TERMINAL POSTS, AND LESS ALL SIDE DRILLING. WITH (2) PUSH BUTTON CONTROLS AND TWO LIGHT INDICATIONS WITH RED JEWELS.
PART NO. ZB8000-X53





TERMINAL BOXES

POLE MOUNTED

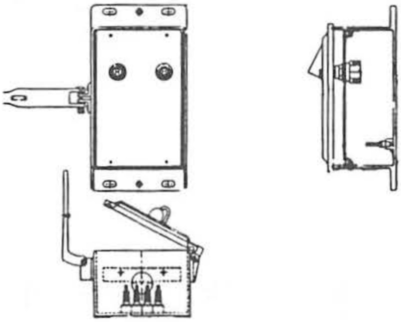
7120 SERIES TERMINAL BOXES:

The 7120 series terminal boxes are produced from all quality cast aluminum. The box is designed for pole wall mounting, and is water resistant. This box is also used as a push button release assembly. The dimensions off the terminal box are:

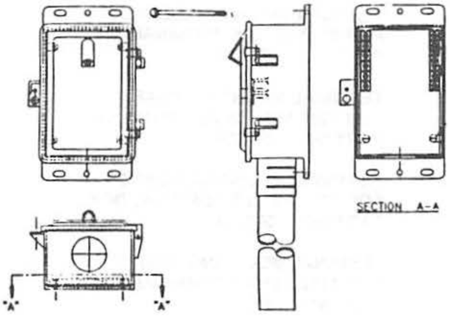
height = 6 1/4"
width = 8 1/2"
length = 12 3/4"

In this section we have shown only a few assemblies available. The 7120 series terminal boxes can be arranged to meet your requirements. Please contact our sales department for proper ordering information.

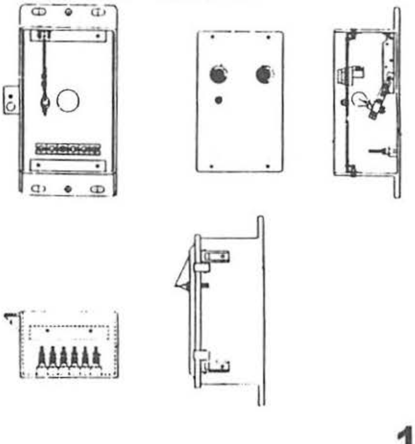
TERMINAL BOX WITH 4 TERMINAL POSTS, AND LESS ALL SIDE DRILLING. WITH TWO N.O. AND N.C. PUSH BUTTON CONTROLS.
PART NO. ZB7120-26X



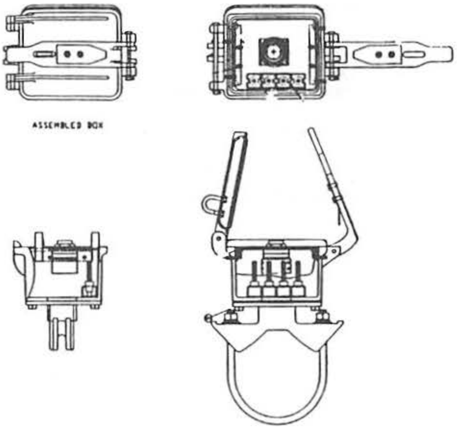
TERMINAL BOX WITH 12 TERMINAL POSTS, AND WITH DRILLING FOR 3" EMT CONDUIT FITTING AT THE BOTTOM. SHIPPED WITH 3" X 60" EMT CONDUIT, AND HARDWARE.
PART NO. 3A7120-X66



TERMINAL BOX WITH 6 TERMINAL POSTS, AND LESS ALL SIDE DRILLING WITH TWO N.O. AND N.C. PUSH BUTTON CONTROL AND TWO LIGHT INDICATIONS WITH RED JEWEL.
PART NO. ZB7120-11X



TERMINAL BOX WITH 4 TERMINAL POSTS, AND WITH ONE N.O. AND N.C. PUSH BUTTON FOR 5" POLE MOUNTING.
PART NO. ZB8000-10X

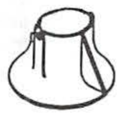


REPLACEMENT PARTS

TERMINAL BOXES

PEDESTAL FLANGE BASES:

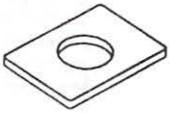
3" PEDESTAL FLANGE BASE
CAST ALUMINUM WITH SET SCREW.
PART NO.



4" PEDESTAL FLANGE BASE
CAST ALUMINUM WITH SET SCREW.
PART NO.

TERMINAL MOUNTING BOARDS (PLYWOOD):

TERMINAL MOUNTING BOARD
FOR 7000 SERIES TERMINAL BOX.
PART NO. 3P7004

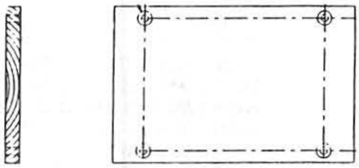


TERMINAL MOUNTING BOARD
FOR 7100 SERIES TERMINAL BOX.
PART NO. 3P7104

TERMINAL MOUNTING BOARD
FOR 7200 SERIES TERMINAL BOX.
PART NO. 3P7204

TERMINAL MOUNTING BOARD
FOR 7300 SERIES TERMINAL BOX.
PART NO. 3P7304

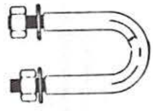
TERMINAL MOUNTING BOARD
FOR 7112 SERIES TERMINAL BOX.
PART NO. 3P7114



TERMINAL MOUNTING BOARD
FOR 7120 SERIES TERMINAL BOX.
PART NO. 3P7121

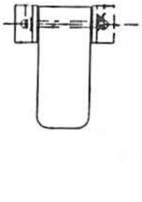
HASP:

U'BOLT HASP FOR USE WITH SPRING
LATCH ASSEMBLY COVERS.
PART NO. 3P8012-X



LEVER ASSEMBLY:

LEVER ASSEMBLY FOR PUSH BUTTON
PART NO. 3P8009-X

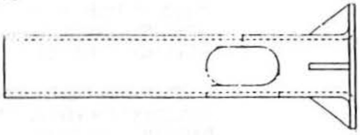


REPLACEMENT PARTS

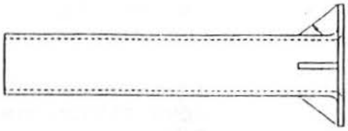
TERMINAL BOXES

PEDESTALS:

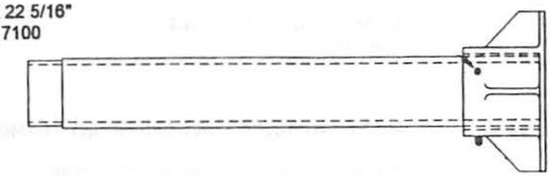
PEDESTAL, ALUMINUM 3 1/4" O.D. X 19" TALL. FOR USE WITH SERIES 7000, 7100 AND 7200 TERMINAL BOXES. WITH SIDE ACCESS CABLE ENTRANCE.
PART NO. 3P7001-1



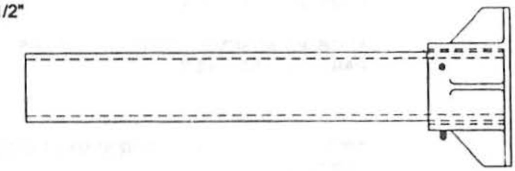
PEDESTAL, ALUMINUM 3 1/4" O.D. X 19" TALL FOR USE WITH SERIES 7000, 7100 AND 7200 TERMINAL BOXES.
PART NO. 3P7000



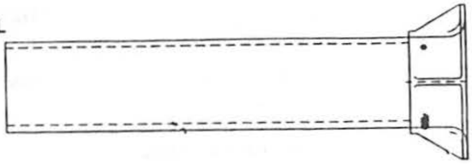
PEDESTAL, ALUMINUM 3 1/4" O.D. X 22 5/16" TALL. FOR USE WITH SERIES 7000, 7100 AND 7200 TERMINAL BOXES.
PART NO. 3P7001-5X



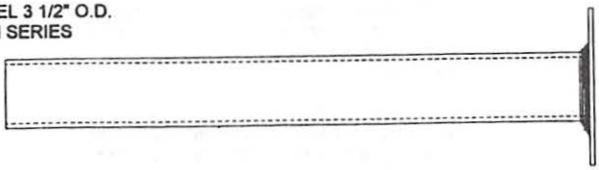
PEDESTAL, ALUMINUM 3 1/2" O.D. X 18 1/2" TALL. FOR USE WITH SERIES 7112 TERMINAL BOXES.
PART NO. 3P7012-X



PEDESTAL. ALUMINUM 4 1/2" O.D. X 18" TALL. FOR USE WITH SERIES 7300 TERMINAL BOXES.
PART NO. 3P7013-X

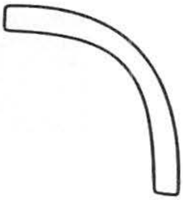


PEDESTAL, GALVANIZED STEEL 3 1/2" O.D. X 30 1/4" TALL. FOR USE WITH SERIES 7112 TERMINAL BOXES.
PART NO. 3P7110



REPLACEMENT PARTS

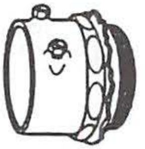
TERMINAL BOXES



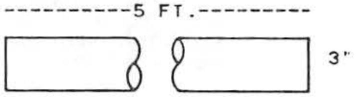
2" LIQUID TIGHT CONDUIT
(SPECIFY LENGTH WHEN ORDERING)
PART NO. ZF70103

1 1/2" LIQUID TIGHT CONDUIT
(SPECIFY LENGTH WHEN ORDERING)
PART NO. ZF70244

1 1/4" LIQUID TIGHT CONDUIT
(SPECIFY LENGTH WHEN ORDERING)
PART NO. ZF70243

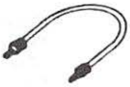


3" EMT CONDUIT SET SCREW TYPE
CONDUIT FITTING. STRAIGHT TO BOX.
PART NO.



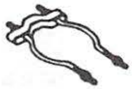
3" EMT CONDUIT 60" LONG
PART NO.

MOUNTING BOLTS FOR POLE MOUNT TERMINAL BOXES:



4" U' BOLT ASSEMBLY WITH HARDWARE
PART NO. KS1044-X

5" U'BOLT ASSEMBLY WITH HARDWARE
PART NO. KS1043-X

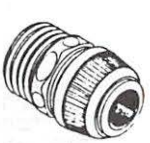


SPLIT BOLT ASSEMBLY FOR 8" MAST MOUNTING.
PART NO.

SPLIT BOLT ASSEMBLY FOR 10" MAST MOUNTING
PART NO.

SPLIT BOLT ASSEMBLY FOR 12" MAST MOUNTING
PART NO.

CORD GRIP CONNECTORS:



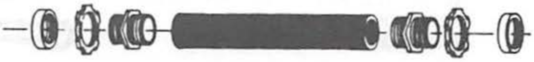
Cord Grip Connector

CORD GRIP CONNECTOR 3/8" EXPANDED
WITH 1/2" NPT MOUNTING THREADS. FOR
PVC INSULATED BONDSTRAND.
PART NO.

CORD GRIP CONNECTOR 1/2" EXPANDED
WITH 1/2" NPT MOUNTING THREADS. FOR
HEAVY RUBBER NEOPRENE BONDSTRAND.
PART NO.

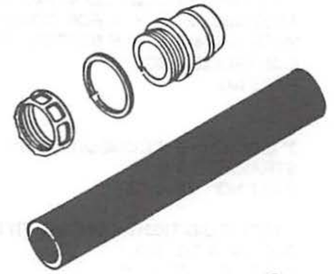
REPLACEMENT PARTS
TERMINAL BOXES

HOSE FITTINGS AND HOSE:
SWITCH TO TERMINAL BOX CONDUIT
24" LONG REINFORCED HOSE AND
(2) 1 1/2" NPT HOSE FITTINGS.
PART NO. JR7065-X



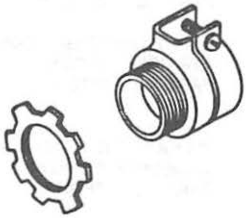
1 3/8" HOSE CONNECTOR FITTING
FOR 1 1/2" NPT HOLE.
PART NO.

1 3/8" HOSE CONNECTOR FITTING
FOR 1 1/4" NPT HOLE.
PART NO.



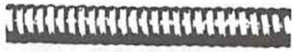
1 3/8" REINFORCED RUBBER HOSE
(SPECIFY LENGTH WHEN ORDERING)
PART NO. JR7065

CONDUIT FITTINGS AND CONDUIT:
1 1/2" STRAIGHT GREENFIELD FLEX
CONDUIT FITTING TO BOX.
PART NO. ZF70106



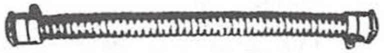
1 1/4" STRAIGHT GREENFIELD FLEX
CONDUIT FITTING TO BOX.
PART NO. ZF70295

1 1/2" GREENFIELD FLEX CONDUIT
(SPECIFY LENGTH WHEN ORDERING)
PART NO. ZC70110



1 1/4" GREENFIELD FLEX CONDUIT
(SPECIFY LENGTH WHEN ORDERING)
PART NO. ZC70111

CONDUIT ASSEMBLY 18", 1 1/2" GREENFIELD
WITH (2) EACH 1 1/2" STRAIGHT CONNECTORS
TO BOX.
PART NO.

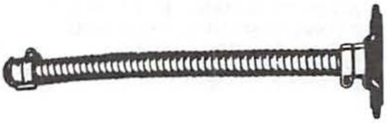


CONDUIT ASSEMBLY 18", 1 1/4" GREENFIELD
WITH (2) EACH 1 1/4" STRAIGHT CONNECTORS
TO BOX.
PART NO.

REPLACEMENT PARTS

TERMINAL BOXES

1 1/2" GREENFIELD FLEX CONDUIT
ASSEMBLY 24" LONG. FOR CONNECTION
WITH G.R.S. STYLE SWITCH CIRCUIT
CONTROLLER BOX.
PART NO.

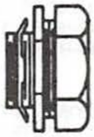


1 1/2" GREENFIELD FLEX CONDUIT
ASSEMBLY 24" LONG. FOR CONNECTION
WITH U.S. & S. STYLE SWITCH CIRCUIT
CONTROLLER BOX.
PART NO.

2" LIQUID TIGHT CONDUIT FITTING
STRAIGHT TO BOX.
PART NO ZF70156

1 1/2" LIQUID TIGHT CONDUIT FITTING
STRAIGHT TO BOX.
PART NO. ZF70106

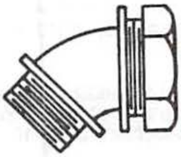
1 1/4" LIQUID TIGHT CONDUIT FITTING
STRAIGHT TO BOX.
PART NO. ZF70241



2" LIQUID TIGHT CONDUIT FITTING
45 DEGREE TO BOX.
PART NO. ZF70128

1 1/2" LIQUID TIGHT CONDUIT FITTING
45 DEGREE TO BOX.
PART NO. ZF70105

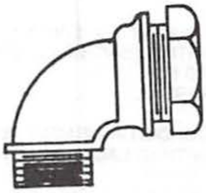
1 1/4" LIQUID TIGHT CONDUIT FITTING
45 DEGREE TO BOX.
PART NO. ZF70242



2" LIQUID TIGHT CONDUIT FITTING
90 DEGREE TO BOX.
PART NO. ZF70103

1 1/2" LIQUID TIGHT CONDUIT FITTING
90 DEGREE TO BOX
PART NO. ZF70244

1 1/4" LIQUID TIGHT CONDUIT FITTING
90 DEGREE TO BOX.
PART NO. ZF70243

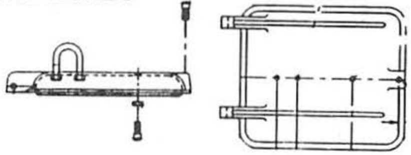


REPLACEMENT PARTS

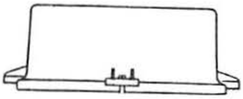
TERMINAL BOXES

COVERS:

COVER FOR 8000 SERIES BOX.
TO INCLUDE LOCKING HASP AND HARDWARE.
PART NO. 3P8021-X



COVER FOR 7000 SERIES BOX.
TO INCLUDE HARDWARE.
PART NO. 3A7004



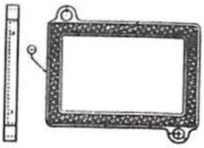
COVER FOR 7005 SERIES BOX.
TO INCLUDE HARDWARE AND LOCKING HASP.
PART NO. 3P7005-2

COVER FOR 7100 SERIES BOX.
TO INCLUDE HARDWARE.
PART NO. 3P7104

COVER FOR 7112 SERIES BOX.
TO INCLUDE HARDWARE.
PART NO. 3P7114

COVER FOR 7200 SERIES BOX.
TO INCLUDE HARDWARE.
PART NO. 3P7204

COVER FOR 7300 SERIES BOX.
TO INCLUDE HARDWARE.
PART NO. 3P7304



COVER FOR 7120 SERIES BOX.
TO INCLUDE HARDWARE.
PART NO. 3P7124

L & W INDUSTRIES

BATTERY

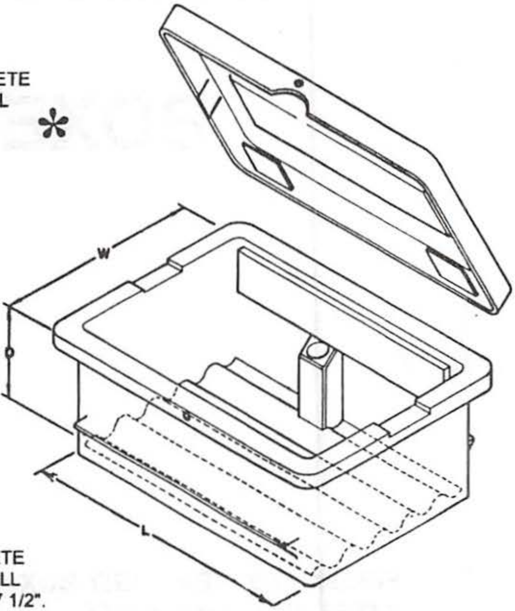
BOXES

FIBERGLASS BATTERY BOXES
STEEL BATTERY BOXES
CONCRETE BATTERY BOXES

FIBERGLASS BATTERY BOXES

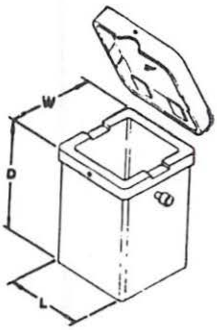
MULTI-CELL BATTERY BOX:

FIBERGLASS BATTERY BOX, COMPLETE WITH LOCKABLE LID FOR MULTI-CELL BATTERIES. D=21" X L=26" X W=20". *
PART NO. 4A9006-X



SINGLE CELL BATTERY BOX:

FIBERGLASS BATTERY BOX COMPLETE WITH LOCKABLE LID FOR SINGLE CELL BATTERY. D=13 1/2" X L= 7 1/2" X W=7 1/2".
PART NO. 4A9004-X

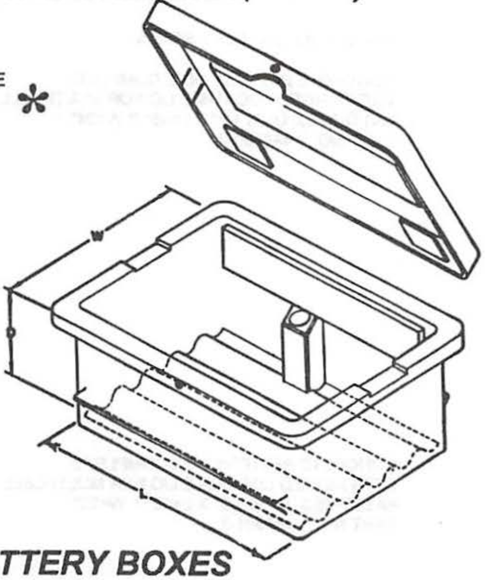


Fiberglass battery boxes are molded from acid resistant materials. The lids are reinforced. The boxes have anti-floatation flanges, integral cable entrance, wood terminal boards and ventilation.

FIBERGLASS BATTERY BOXES (CONT.)

FIBERGLASS BATTERY BOX:

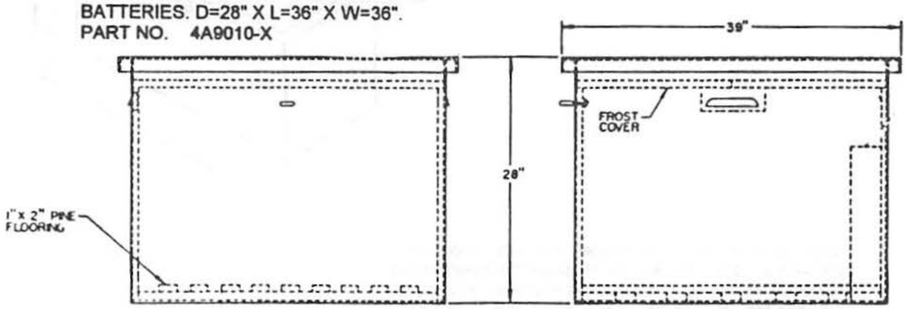
FIBERGLASS BATTERY BOX, COMPLETE WITH LOCKABLE LID FOR MULTI-CELL BATTERIES. D=21' X L=36" X W=36". *
PART NO. 4A9003-X



STEEL BATTERY BOXES

MULTI-CELL BATTERY BOXES:

STEEL BATTERY BOX, COMPLETE WITH LOCKABLE LID FOR MULTI-CELL BATTERIES. D=28" X L=36" X W=36".
PART NO. 4A9010-X

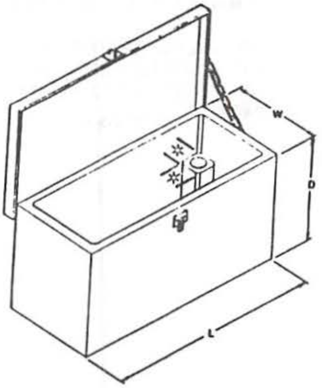


Steel battery boxes are fabricated and hot dipped galvanized for corrosion resistance. The lids are reinforced. The frost cover, lattice flooring and walls are painted with an acid resistant paint.

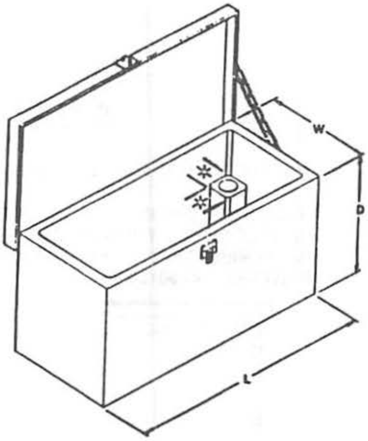
CONCRETE BATTERY BOXES

MULTI-CELL BATTERY BOXES:

CONCRETE BATTERY BOX, COMPLETE
WITH HINGED LOCKABLE LID FOR MULTI-CELL
BATTERIES. D=23 1/2" X L=45" X W=24".
PART NO. 4A9500-X



CONCRETE BATTERY BOX COMPLETE
WITH HINGED LOCKABLE LID FOR MULTI-CELL
BATTERIES. D=30 1/2" X L=62" X W=23".
PART NO. 4A9501-X



Concrete battery boxes are molded one piece reinforced concrete structure. The lids are 10 gauge steel painted and hinged to the box. The lid incorporates a safety lock rod for the open position. The frost cover, lattice flooring and walls are painted with an acid resistant paint.

L & W INDUSTRIES

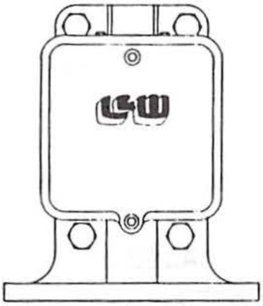
SIGNAL

BASES

3 & 4 INCH SPLIT BASES
5 INCH SPLIT BASES
4 & 5 INCH SINGLE JUNCTION BOX BASES
4 & 5 INCH DOUBLE JUNCTION BOX BASES

L & W INDUSTRIES

SIGNAL BASES
FOR
3-4&5 INCH MASTS



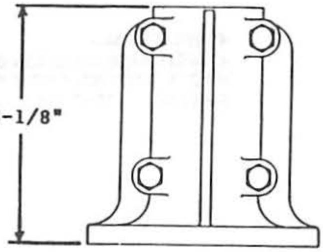
L&W Cast Signal Bases are available in different configurations such as, Split, Single Junction Box and Double Junction box. Where required they are supplied with AAR terminal posts and rodent plate. Available in aluminum and cast iron. All bolt holes are slotted for easy installation.

SIGNAL BASES

Signal bases are produced from quality cast aluminum. Cast iron is available on limited parts. Please inquire with our sales department if further information is required.

3" SPLIT BASES:

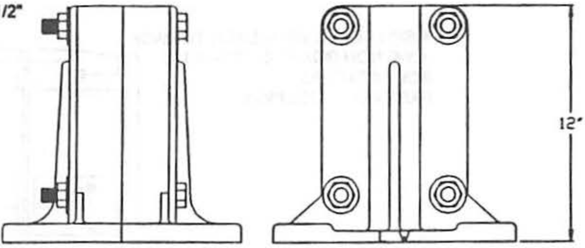
3" SPLIT BASE WITH 9 1/2" X 9 1/2" BOLT SPACING
PART NO. 7D5650-X



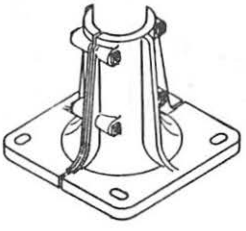
4" SPLIT BASES:

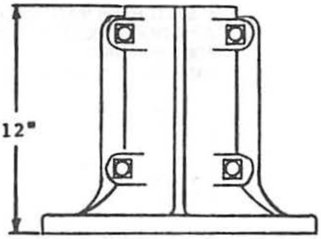
4" SPLIT BASE WITH 6" X 8" BOLT SPACING.
PART NO. 7D5720-X

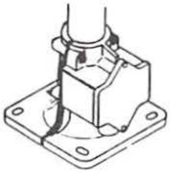
4" SPLIT BASE WITH 9 1/2" X 9 1/2" BOLT SPACING.
PART NO. 7D5710-X *



4" SPLIT BASE WITH 11 11/16" X 11 11/16" BOLT SPACING.
PART NO. 7D5810-X





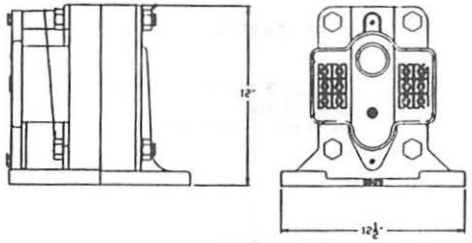


SIGNAL BASES

Signal bases are produced from quality cast aluminum. Cast iron is available on limited parts. Please inquire with our sales department if further information is required.

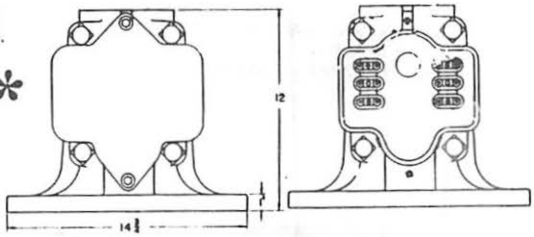
4" SPLIT BASES:
4" SPLIT BASE JUNCTION BOX WITH 9 1/2" X 9 1/2" BOLT SPACING.
PART NO. 7D5700-X

*

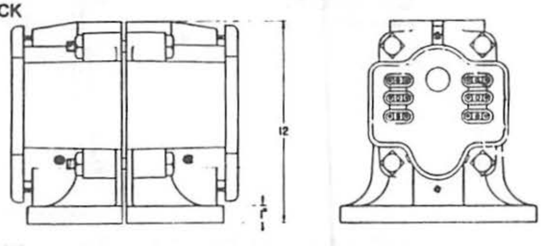


4"SPLIT BASE JUNCTION BOX WITH 11 11/16" X 11 11/16" BOLT SPACING.
PART NO. 7D5800-X

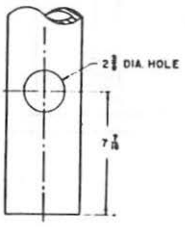
*

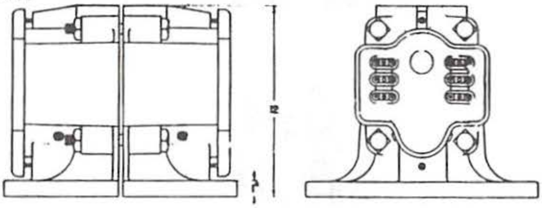


4"SPLIT BASE WITH BACK TO BACK JUNCTION BOXES 9 1/2" X 9 1/2" BOLT SPACING.
PART NO. 7D5730-X



4" SPLIT BASE WITH BACK TO BACK JUNCTION BOXES 11 11/16" X 11 11/16" BOLT SPACING.
PART NO. 7D5830-X





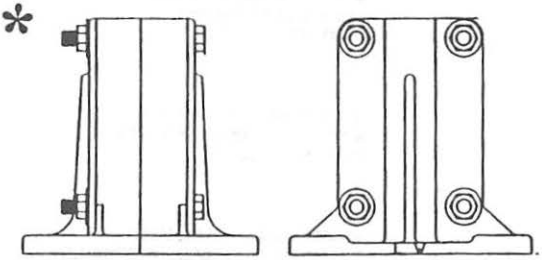
SIGNAL BASES

5" SPLIT BASES:

**5" SPLIT BASE WITH 11 11/16" X 11 11/16"
BOLT SPACING. CAST ALUMINUM.
PART NO. 7D5922-X**

**5" SPLIT BASE WITH 11 11/16" X 11 11/16"
BOLT SPACING. CAST IRON
PART NO. 7D5922-XFE**

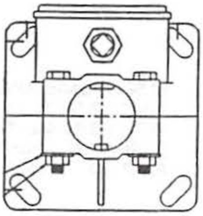
*

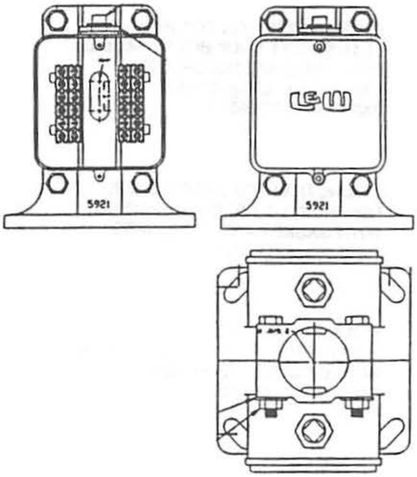


**5" SPLIT JUNCTION BOX BASE WITH
11 11/16" X 11 11/16" BOLT SPACING.
CAST ALUMINUM.
PART NO. 7D5920-X**

**5" SPLIT JUNCTION BOX BASE WITH
11 11/16" X 11 11/16" BOLT SPACING.
CAST IRON.
PART NO. 7D5920-XFE**

*



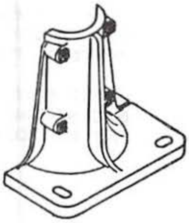


**5" SPLIT BACK TO BACK JUNCTION
BOX BASE 11 11/16" X 11 11/16"
BOLT SPACING. CAST ALUMINUM.
PART NO. 7D5930-X**

**5" SPLIT BACK TO BACK JUNCTION
BOX BASE 11 11/16" X 11 11/16"
BOLT SPACING. CAST IRON.
PART NO. 7D5930-XFE**

REPLACEMENT PARTS

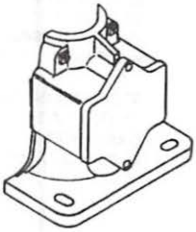
4" BASES:



4" SPLIT BASE PLAIN HALF
6" X 8" BOLT SPACING.
PART NO. JC5720

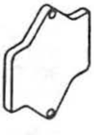
4" SPLIT BASE PLAIN HALF
9 1/2" X 9 1/2" BOLT SPACING.
PART NO. JC5701

4" SPLIT BASE PLAIN HALF
11 11/16" X 11 11/16" BOLT SPACING
PART NO. JC5801



4" SPLIT BASE JUNCTION BOX HALF
9 1/2" X 9 1/2" BOLT SPACING.
WITH TERMINAL BLOCKS AND
HARDWARE. LESS COVER.
PART NO. 7D5702-X

4" SPLIT JUNCTION BOX HALF
11 11/16" X 11 11/16" BOLT SPACING.
WITH TERMINAL BLOCK AND
HARDWARE. LESS COVER.
PART NO. 7D5802-X



4" JUNCTION BOX BASE COVER.
FOR 9 1/2" X 9 1/2" BOLT SPACING
WITH GASKET AND HARDWARE.
PART NO. 7P5703

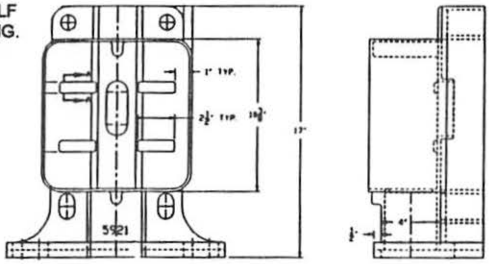
4" JUNCTION BOX BASE COVER.
FOR 11 11/16" X 11 11/16" BOLT SPACING
WITH GASKET ANS HARDWARE.
PART NO. 7P5803

REPLACEMENT PARTS

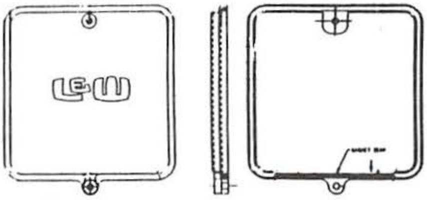
5" BASES:

5" SPLIT BASE PLAIN HALF
11 11/16" X 11/16" BOLT SPACING.
PART NO. JC5922

5" SPLIT BASE JUNCTION BOX HALF
11 11/16" X 11 11/16" BOLT SPACING.
WITH TERMINAL BLOCKS AND
HARDWARE. LESS COVER.
PART NO. 7D5921-X



5" JUNCTION BOX BASE COVER
FOR 11 11/16" X 11 11/16" BOLT SPACING.
WITH GASKET AND HARDWARE.
PART NO. 7D5923



GASKET, FOR ALL 4" AND 5" JUNCTION
BOX COVERS.
PART NO.

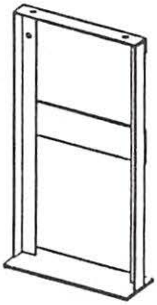
L & W INDUSTRIES

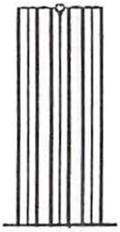
FOUNDATIONS

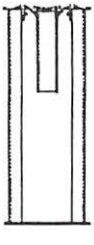
GALVANIZED STEEL-SIGNAL,HOUSES,CASE
CONCRETE-SIGNAL,CANTILEVER
LADDER FOUNDATION
POUR IN PLACE FOUNDATION
ANCHOR BOLTS
ADAPTER PLATE
REPLACEMENT PARTS

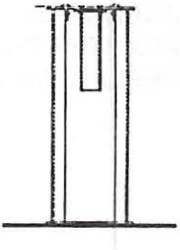
G G G G G G G

FOUNDATIONS







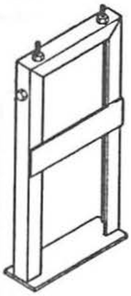


L&W Steel Foundations are welded together to form a rigid structure, that is hot-dip galvinized, and shipped complete with mounting hardware.

GALVANIZED STEEL FOUNDATIONS

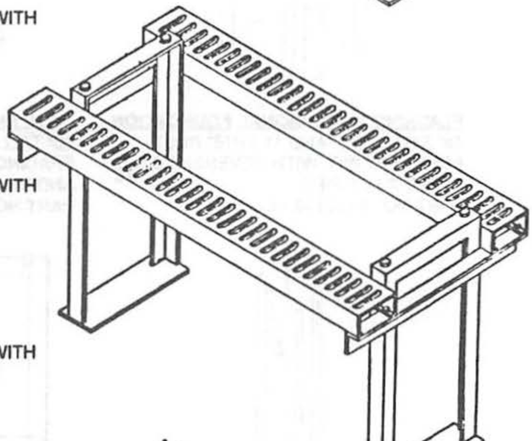
Steel foundations are fabricated, and the hot dipped galvanized. All foundations are shipped with the proper mounting hardware and cable inlet pipes.

INSTRUMENT CASE FOUNDATIONS:



INSTRUMENT CASE FOUNDATION 48" *
TALL WITH 18 1/2" BOLT SPACING.
PART NO. 8A20101-X

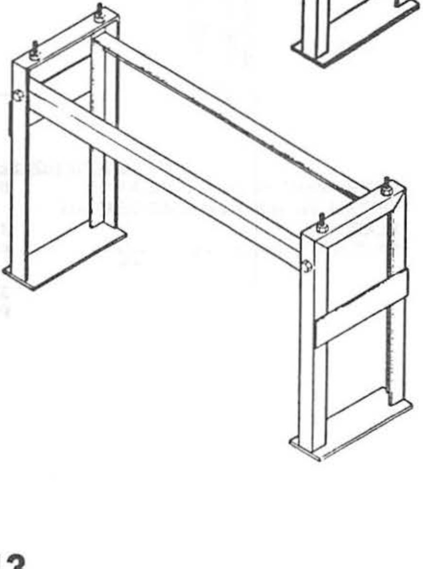
INSTRUMENT CASE FOUNDATION 36"
TALL WITH 181/2" BOLT SPACING.
PART NO. 8A20201-X



INSTRUMENT CASE FOUNDATION WITH
WORK PLATFORM ASSEMBLY. FOR
41" INSTRUMENT CASE.
SINGLE WORK PLATFORM
PART NO. 8A20174-41X
DOUBLE WORK PLATFORM
PART NO. 8A20178-41X

INSTRUMENT CASE FOUNDATION WITH
WORK PLATFORM ASSEMBLY. FOR
60" INSTRUMENT CASE.
SINGLE WORK PLATFORM
PART NO. 8A20174-60X
DOUBLE WORK PLATFORM
PART NO. 8A20178-60X

INSTRUMENT CASE FOUNDATION WITH
WORK PLATFORM ASSEMBLY. FOR
81" INSTRUMENT CASE.
SINGLE WORK PLATFORM
PART NO. 8A20174-81X
DOUBLE WORK PLATFORM
PART NO. 8A20178-81X



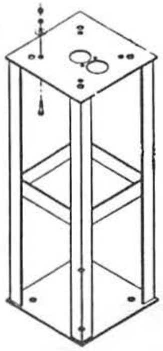
INSTRUMENT CASE FOUNDATION WITH
CROSSBRACE ANGLES FOR 41"
INSTRUMENT CASE.
PART NO. 8A20200-41X

INSTRUMENT CASE FOUNDATION WITH
CROSSBRACE ANGLES FOR 60"
INSTRUMENT CASE.
PART NO. 8A20200-60X

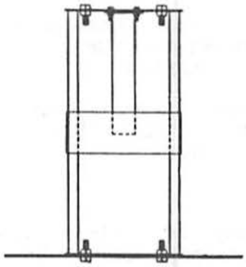
INSTRUMENT CASE FOUNDATION WITH
CROSSBRACE ANGLES FOR 81"
INSTRUMENT CASE.
PART NO. 8A20200-81X

GALVANIZED STEEL FOUNDATIONS

Steel foundations are fabricated, and the hot dipped galvanized. All foundations are shipped with the proper mounting hardware and cable inlet pipes.

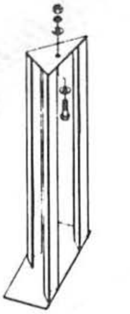


FLASHING LIGHT SIGNAL FOUNDATION
48" TALL. 9 1/2" AND 11 11/16" BOLT
BOLT SPACING. WITH REVERSIBLE *
CABLE INLET PIPE.
PART NO. 8A20140-1X

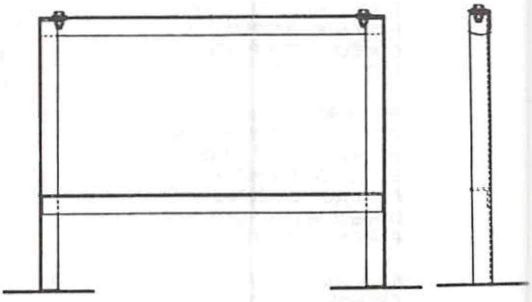


GATE AND FLASHER SIGNAL FOUNDATION
48" TALL. 9 1/2" AND 11 11/16" BOLT
SPACING WITH 36" X 36" LOAD PLATE *
AND REVERSIBLE CABLE INLET PIPE
PART NO. 8A20140-X

INSTRUMENT HOUSE FOUNDATIONS



INSTRUMENT HOUSE FOUNDATION
48" TALL WITH 8" X 24" LOAD BEARING
PLATE.
PART NO. 8A20126-X *



INSTRUMENT HOUSE FOUNDATION

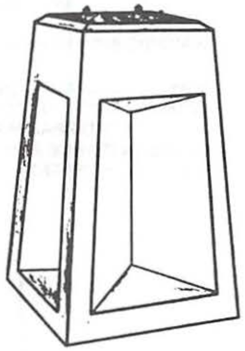
3' x 4' INSTRUMENT HOUSE
PART NO. 8A20186-X

3 1/2' x 4' INSTRUMENT HOUSE
PART NO. 8A20162-X

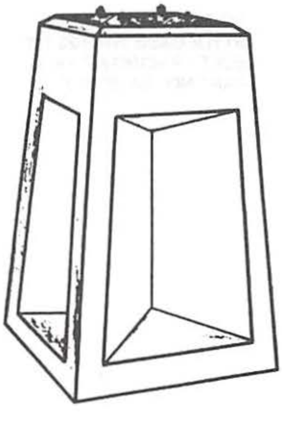
CONCRETE FOUNDATIONS
ONE PIECE REINFORCED

CONCRETE FOUNDATIONS:

ONE PIECE CONCRETE FOUNDATION
9 1/2" X 9 1/2" BOLT SPACING 3/4 - 10
BOLT DIAMETER. 48" TALL, 720 LBS.
BOLT PROJECTION 2 1/2"
PART NO. 8A31719-2X



ONE PIECE CONCRETE FOUNDATION
11 11/16" X 11 11/16" BOLT SPACING.
1"- 8 BOLT DIAMETER. 54" TALL, 1640
LBS. 3 1/2" BOLT PROJECTION.
PART NO. 8A31721-1X

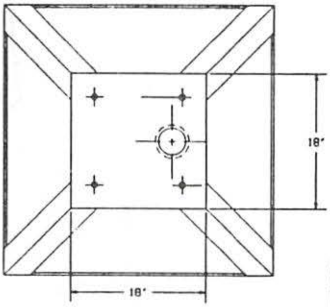


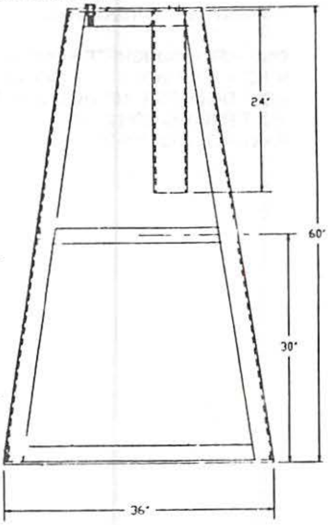
GALVANIZED STEEL FOUNDATIONS

Steel foundations are fabricated, and the hot dipped galvanized. All foundations are shipped with the proper mounting hardware and cable inlet pipes.

WAYSIDE SIGNAL FOUNDATION:

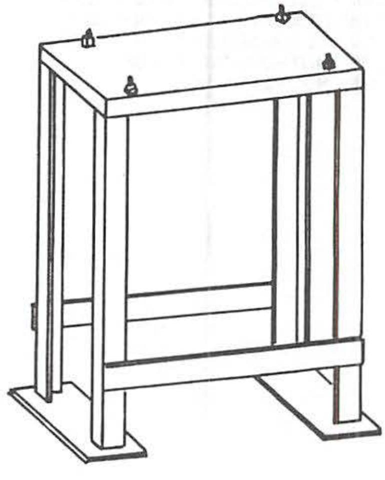
WAYSIDE SIGNAL FOUNDATION 60" TALL
WITH 11 11/16" X 11 11/16' BOLT SPACING. *
32" X 32" LOAD BEARING PLATE. INCLUDING
CABLE ENTRANCE PIPES.
PART NO. 8A20157-X





INSTRUMENT CASE AND SIGNAL FOUNDATION:

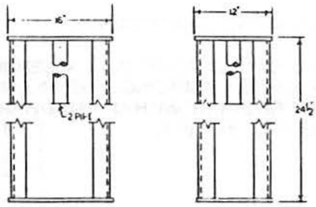
FOUNDATION FOR B10
STYLE CASE WITH 23 7/8"
BOLT SPACING 48" TALL
PART NO. 8A20180-X



GALVANIZED STEEL FOUNDATIONS

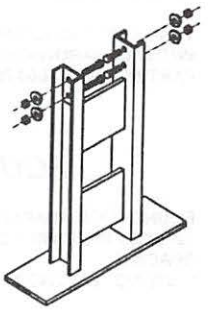
DWARF SIGNAL FOUNDATIONS:

DWARF SIGNAL FOUNDATION, UNIVERSAL WITH MULTIPLE BOLT SPACING. 24" TALL. INCLUDES CABLE ENTRANCE PIPE.
PART NO. 8A20133-X



LADDER FOUNDATIONS:

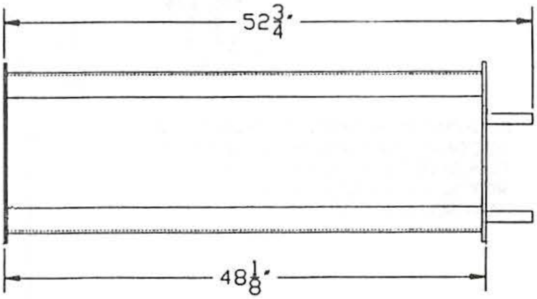
LADDER FOUNDATION FOR 8" WIDE STEEL LADDER. *
24" TALL
PART NO. 5J7410-X

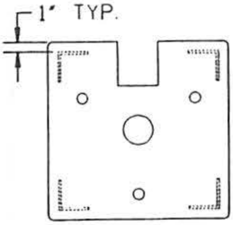


LADDER FOUNDATION FOR 16" WIDE ALUMINUM LADDER
24" TALL
PART NO.

TOWER FOUNDATIONS:

TOWER FOUNDATION 48" TALL FOR 3 POST TOWER STAND.
PART NO. 8A20222-X

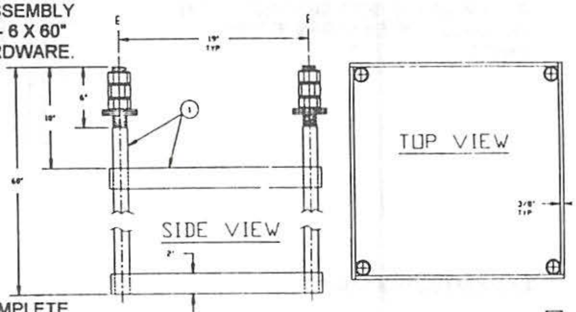




ANCHOR BOLT ASSEMBLIES

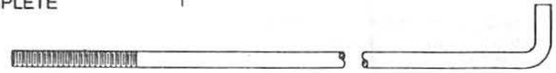
ANCHOR BOLT ASSEMBLIES:

FABRICATED ANCHOR BOLT ASSEMBLY 19" X 19" BOLT SPACING. 1 1/2" - 6 X 60" ANCHOR BOLTS. WITH ALL HARDWARE.
PART NO. 8A5110-X



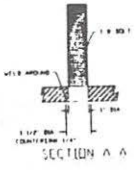
ANCHOR BOLTS:

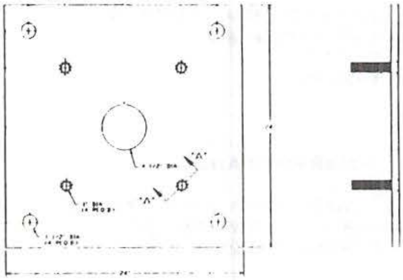
1 1/2" X 60" ANCHOR BOLTS COMPLETE WITH ALL HARDWARE.
PART NO. 8A071880-000



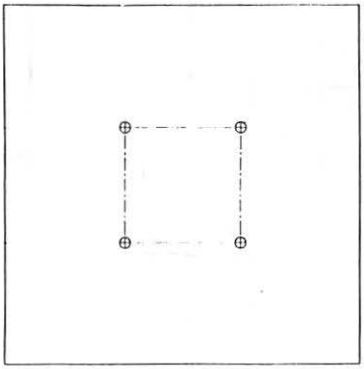
FOUNDATION ADAPTER PLATES

FOUNDATION ADAPTER PLATE FROM 19" BOLT SPACING TO 11 11/16" BOLT SPACING.
PART NO. 8A20142-X





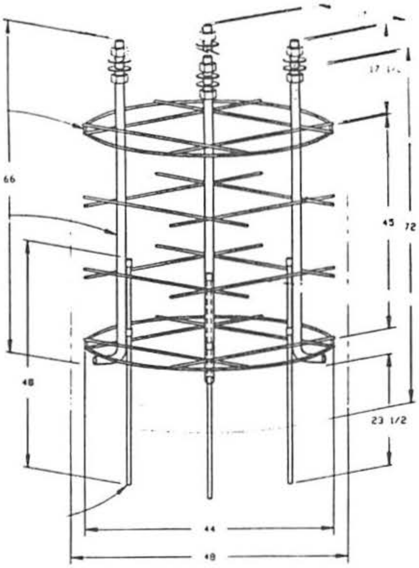
FOUNDATION ADAPTER/ANCHOR PLATE TO CONVERT A FLASHER FOUNDATION TO A GATE FOUNDATION. 1/4" THICK 36" X 36" GALVANIZED STEEL.
PART NO. 8A20140



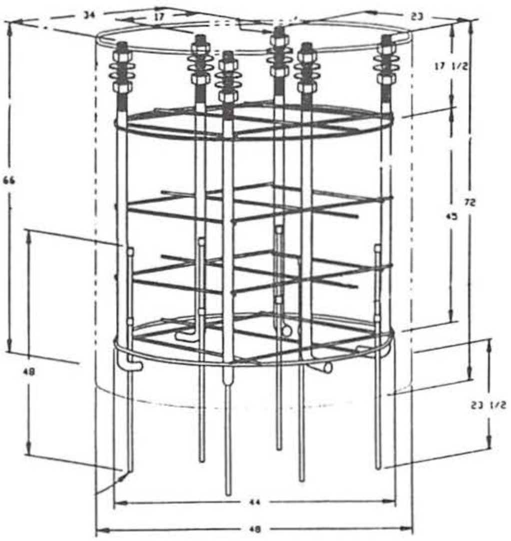
POUR IN PLACE FOUNDATIONS

POUR IN PLACE FOUNDATIONS:

SINGLE MAST WALKOUT CANTILEVER POUR IN PLACE FOUNDATION ASSEMBLY. WITH REBAR, 48" X 72" SONA-TUBE, AND ANCHOR BOLTS FOR 19" X 19" BOLT SPACING.
PART NO. 8A031146-000


17 1/2
66
45
72
48
23 1/2
44
48

DOUBLE MAST WALKOUT CANTILEVER POUR IN PLACE 6 BOLT FOUNDATION ASSEMBLY. WITH REBAR, 48" X 72" SONA-TUBE, AND ANCHOR BOLTS FOR 23" X 17" X 17" BOLT SPACING.
PART NO. 8A031120-000


34
17
23
17 1/2
66
72
45
48
23 1/2
44
48

L & W INDUSTRIES

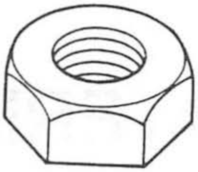
WIRING

MATERIALS

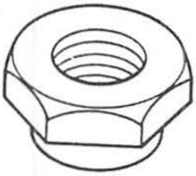
AAR NUTS, WASHERS, TERMINAL BLOCKS
TEST LINKS
TEST TERMINALS
INSULATED EYELETS
GROUND BUS BARS & GROUND STUDS
FUSE BLOCKS & RESISTORS
RING TONGUE & FLAG TERMINALS
CONNECTING STRAPS & BINDING POSTS
CASE WIRE-NYLON, TEFZEL, POLY
PLUG IN RELAY PARTS
WIRING TAGS & MARKING PENS

AAR HARDWARE

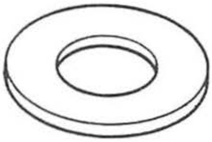
AAR CLAMP NUT
PART NO. 9A2202 *



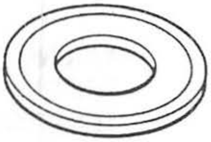
AAR BINDING NUT
PART NO. 9A2204 *



AAR CLAMP WASHER
PART NO. 9A2209 *

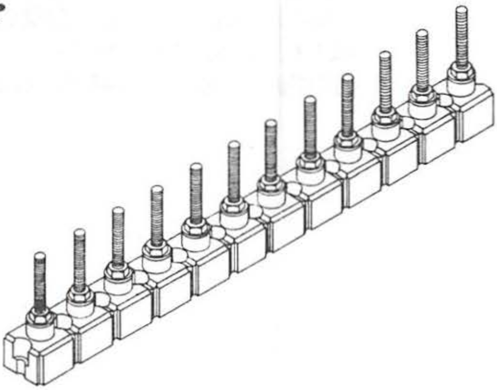


AAR BINDING WASHER
PART NO. 9A2203 *



TERMINAL BLOCKS

1 X 12 TERMINAL BLOCK
WITH AAR HARDWARE
PART NO. 9A2230-X *



1 X 6 TERMINAL BLOCK
WITH AAR HARDWARE
PART NO. 9A2230-6X

1 X 3 TERMINAL BLOCK
WITH AAR HARDWARE
PART NO. 9A2230-3X

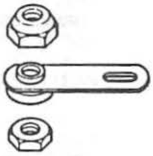
2 X 6 TERMINAL BLOCK
WITH AAR HARDWARE
PART NO. 9A2231-X

TEST LINKS

1" TEST INSULATED TEST LINKS:
1" TEST LINK ONLY-STRAIGHT
PART NO. 9A2205

1" TEST LINK-STRAIGHT WITH TEST NUT
PART NO. 9A2205-X *

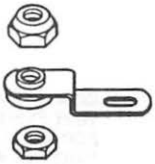
1" TEST LINK-STRAIGHT WITH TEST NUT
AND CLAMP NUT.
PART NO. 9A2205-1X



1" TEST LINK ONLY-OFFSET
PART NO. 9A2205-7

1" TEST LINK-OFFSET WITH TEST NUT
PART NO. 9A2205-11X *

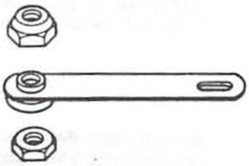
1" TEST LINK-OFFSET WITH TEST NUT
AND CLAMP NUT.
PART NO. 9A2205-7X *



2 3/8" INSULATED TEST LINKS:
2 3/8" TEST LINK ONLY-STRAIGHT
PART NO. 9A2211

2 3/8" TEST LINK-STRAIGHT WITH TEST NUT
PART NO. 9A2211-X

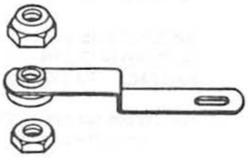
2 3/8" TEST LINK-STRAIGHT WITH TEST NUT
AND CLAMP NUT.
PART NO. 9A2211-1X



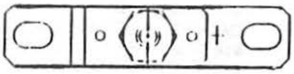
2 3/8" TEST LINK ONLY-OFFSET
PART NO. 9A2211-7

2 3/8" TEST LINK-OFFSET WITH TEST NUT
PART NO. 9A2211-8X

2 3/8" TEST LINK-OFFSET WITH TEST NUT
AND CLAMP NUT.
PART NO. 9A2211-12X

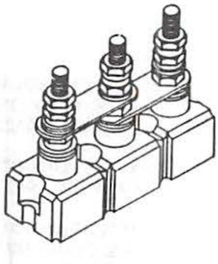


CENTER CONTROL TEST LINK:
CENTER CONTROL TEST LINK FOR
MOUNTING ON 2 3/8" TERMINAL BLOCK.
PART NO. 9A2212-X



TEST NUT:
#14-24 COUNTERBORED, GOLD PLATED TEST NUT
PART NO 9A2208 *

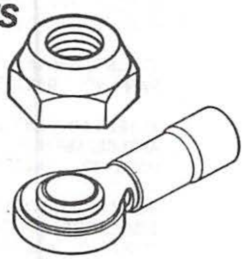
TEST TERMINAL



TEST TERMINALS:
THREE POST TEST TERMINAL WITH ONE TEST NUT AND ONE TEST LINK FOR SINGLE SERIES CIRCUIT SWITCH.
PART NO. 9A2210-X

THREE POST TEST TERMINAL WITH TWO TEST NUTS AND TWO TEST LINKS FOR DOUBLE SERIES CIRCOIT SWITCH.
PART NO. 9A2210-1X

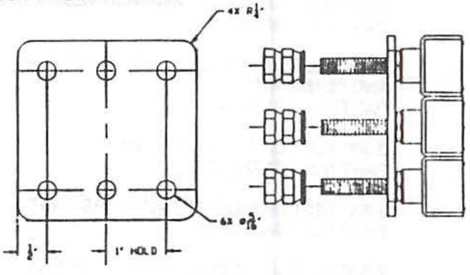
INSULATED TEST EYELETS



INSULATED TEST EYELETS:
TEST EYELET ONLY NO. 10-12 WIRE FOR 1/4" TERMINAL POST.
PART NO. 9A2207

TEST EYELET NO. 10-12 WIRE FOR 1/4" TERMINAL POST, WITH TEST NUT.
PART NO. 9A2207-X

GROUND BUS BAR

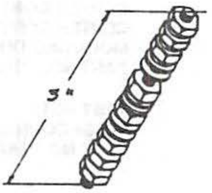


GROUND BUS BAR ASSEMBLY:
GROUND BUS BAR ASSEMBLY MOUNTED ON TERMINAL BLOCK WITH ALL TERMINAL HARDWARE.
PART NO. FA23000-X

GROUND BUS BAR:
GROUND BUS BAR ONLY
PART NO. FA23000

Ground bus bar has a minimum .003" nickel plated finish.

GROUND STUD



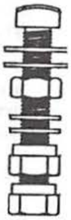
GROUND STUD:
GROUND STUD ASSEMBLY WITH #14-24 x 3" GROUND STUD BOLT, AND ALL HARDWARE.
PART NO. 9A2219-X

GROUND STUD BOLT ONLY #14-24 x 3".
PART NO. 9A2219

TERMINAL HARDWARE

BINDING POST:

BINDING POST ASSEMBLY 3/8" SQUARE
#14-24 X 1 1/2" LONG. WITH HARDWARE.
PART NO. 9A2236-X



BINDING POST ASSEMBLY 3/8" SQUARE
#14-24 X 1 7/8" LONG. WITH HARDWARE.
PART NO. 9A2238-X

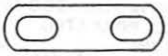
BINDING POST ASSEMBLY 3/8" SQUARE
#14-24 X 2" LONG. WITH HARDWARE.
PART NO. 9A2239-X

BINDING POST ONLY 3/8" SQUARE
#14-24 X 1 1/2" LONG.
PART NO. 9A2236

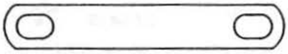
BINDING POST ONLY 3/8" SQUARE
#14-24 X 2" LONG.
PART NO. 9A2239

CONNECTING STRAPS:

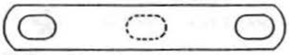
1" SOLID CONNECTING STRAP
PART NO. 9A2200
*



2 3/8" SOLID CONNECTING STRAP
PART NO. 9A2201
*

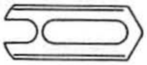


1" CENTERS CONNECTING BUSS STRAP
12" LONG.
PART NO. 9A2216-12

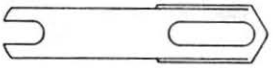


1" CENTERS CONNECTING BUSS STRAP
36" LONG.
PART NO. 9A2216-36

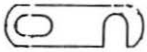
1" SLIDE CONNECTING STRAP
PART NO. 9A2215



2 3/8" SLIDE CONNECTING STRAP
PART NO. 9A2217



1" TEST LINK CONNECTING STRAP
PART NO. 9A2218



CASE AND HOUSE WIRE

BRAIDED CASE AND HOUSE WIRE:

NO. 16/19 STRANDED TINNED
NYLON BRAID INSULATED. *
PART NO. DA6409

NO. 10/37 STRANDED TINNED
NYLON BRAID INSULATED. *
PART NO. DA6403

TC BLUE CASE AND HOUSE WIRE:

NO. 16/19 STRANDED TINNED
TC BLUE INSULATED.
PART NO. DA6408 *

NO. 10/37 STRANDED TINNED
TC BLUE INSULATED.
PART NO. DA6410 *

TEFZEL CASE AND HOUSE WIRE:

NO. 16/19 STRANDED TINNED
TEFZEL INSULATED.
PART NO. DA6448 *

NO. 10/37 STRANDED TINNED
TEFZEL INSULATED.
PART NO. DA6449 *

TWISTED HOOK UP WIRE:

TWISTED NO. 14 RED AND BLACK
POLY INSULATED.
PART NO. DA6450 *

TWISTED NO. 14 WHITE AND BLACK
POLY INSULATED.
PART NO. DA6452

TWISTED NO. 10 RED AND BLACK
POLY INSULATED.
PART NO. DA6455

GROUND WIRE:

NO. 6 SOFT DRAWN COPPER WIRE
PART NO. DA6422
*

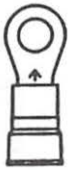
RING TONGUE AND FLAG TERMINALS

RING TONGUE TERMINAL:

TERMINAL RING TONGUE HEAVY
NO. 14-16 WIRE (AMP ONLY)
1/4" STUD MOUNTING SIZE.
PART NO. 9A2242

TERMINAL RING TONGUE HEAVY
NO. 14-16 WIRE (AMP ONLY)
#6 STUD MOUNTING SIZE.
PART NO. 9A2244

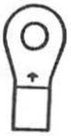
TERMINAL RING TONGUE HEAVY
NO. 10-12 WIRE (AMP ONLY)
1/4" STUD MOUNTING SIZE.
PART NO. 9A2243



TERMINAL RING TONGUE HEAVY
NO. 10-12 WIRE (AMP ONLY)
#6 STUD MOUNTING SIZE.
PART NO. 9A2241

TERMINAL RING TONGUE HEAVY
NO. 18-22 WIRE (AMP ONLY)
1/4" STUD MOUNTING SIZE.
PART NO. 9A2248

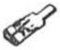
TERMINAL RING TONGUE, NON INSULATED
NO. 6-8 WIRE (AMP ONLY)
1/4" STUD MOUNTING SIZE
PART NO. 9A2259



TERMINAL RING TONGUE, NON INSULATED
NO. 6-8 WIRE (AMP ONLY)'
3/8" STUD MOUNTING SIZE.
PART NO. 9A2261

FLAG TERMINALS:

FLAG TERMINAL FOR STYLE B RELAY
NO. 10-12 WIRE.
PART NO. 9A2249



FLAG TERMINAL FOR STYLE B RELAY
NO. 16-20 WIRE.
PART NO. 9A2250

FLAG TERMINAL FOR STYLE B RELAY
NO. 10-16 WIRE, SOLDER TYPE.
PART NO. 9A2250-1

FUSE BLOCKS

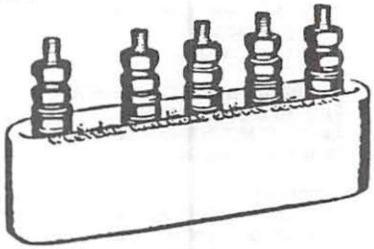
FUSE BLOCKS:
SINGLE DISCONNECT FUSE BLOCK
PART NO

DOUBLE DISCONNECT FUSE BLOCK
PART NO.

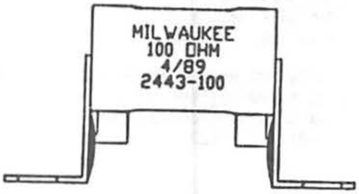
RESISTORS

MULTI-TAP RESISTORS:
PART NO. 9A2444-X
This resistor has the following ratings:

Connection	Ohms	
1 and 2	0.1	
2 and 3	0.2	
3 and 4	0.3	
4 and 5	0.4	
2 and 4	0.5	
1 and 4	0.6	
3 and 5	0.7	
1 and 5	0.8	(And strap between 2 and 3)
2 and 5	0.9	
1 and 5	1.0	



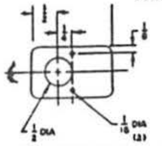
FIXED SEALED RESISTORS:
2 OHM FIXED RESISTOR
PART NO. 9A2444-2X
10 OHM FIXED RESISTOR
PART NO 9A2444-10X
100 OHM FIXED RESISTOR
PART NO 9A2444-100X
500 OHM FIXED RESISTOR
PART NO. 9A2444-500X
Fixed resistors are shipped mounted on a 2 post terminal block.



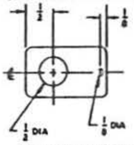
ADJUSTABLE RESISTORS:
1 OHM ADJUSTABLE RESISTOR
PART NO 9A1110-1
2.2 OHM ADJUSTABLE RESISTOR
PART NO 9A1110-3
4 OHM ADJUSTABLE RESISTOR
PART NO 9A1110-6
5.69 OHM ADJUSTABLE RESISTOR
PART NO. 9A1110-7
8.9 OHM ADJUSTABLE RESISTOR
PART NO. 9A1110-9

WIRING TAGS

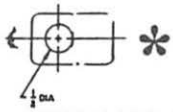
Wiring tags are produced in white plastic, white fiber, and black fiber.



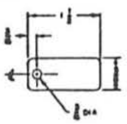
BLACK FIBER	AA2004
WHITE FIBER	AA2006
* WHITE PLASTIC	AA2006-1



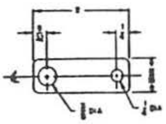
BLACK FIBER	AA2007
WHITE FIBER	AA2008
WHITE PLASTIC	AA2008-1



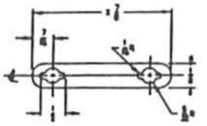
WHITE PLASTIC AA2000-1 *



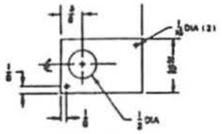
BLACK FIBER	AA2029
WHITE FIBER	AA2036
WHITE PLASTIC	AA2036-1



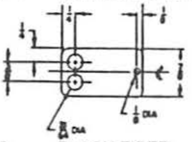
BLACK FIBER	AA2030
WHITE FIBER	AA2032
WHITE PLASTIC	AA2032-1



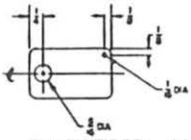
BLACK FIBER	AA2034
WHITE FIBER	AA2035
WHITE PLASTIC	AA2035-1 *



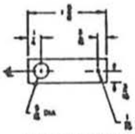
BLACK FIBER	AA2012
WHITE FIBER	AA2013
WHITE PLASTIC	AA2013-1



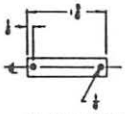
BLACK FIBER	AA2014
WHITE FIBER	AA2016
WHITE PLASTIC	AA2016-1



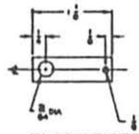
BLACK FIBER	AA2017
WHITE FIBER	AA2019
WHITE PLASTIC	AA2019-1



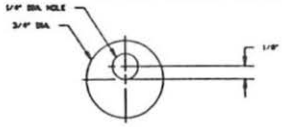
BLACK FIBER	AA2065
WHITE FIBER	AA2065-2
WHITE PLASTIC	AA2065-3



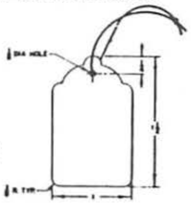
BLACK FIBER	AA2023
WHITE FIBER	AA2025
WHITE PLASTIC	AA2025-1



BLACK FIBER	AA2020
WHITE FIBER	AA2022
WHITE PLASTIC	AA2022-1



WHITE PLASTIC AA2067



.020" THICK CARDBOARD, HANGING

RED	AA2700-1
YELLOW	AA2700-2
GREEN	AA2700-3
WHITE	AA2700-4

* LW P/N AA2070 MARKING PEN

L & W INDUSTRIES

SIGNAL CABLE & WIRE

UNDERGROUND DIRECT BURIAL
TRACK WIRE
BONDSTRAND

UNDERGROUND CABLE

UNDERGROUND DIRECT BURIAL CABLE:

7 CONDUCTOR NO. 14 BRONZE TAPE
PART NO. DA6652

12 CONDUCTOR NO. 14 BRONZE TAPE
PART NO. DA6654

5 CONDUCTOR NO. 9 BRONZE TAPE
PART NO.

7 CONDUCTOR NO. 9 SOLID BRONZE TAPE
PART NO. **DA6656**

3 CONDUCTOR NO. 6 SOLID BRONZE TAPE *
PART NO. **DA6650**

5 CONDUCTOR NO. 6 SOLID BRONZE TAPE
PART NO. DA6651

7 CONDUCTOR NO. 6 SOLID BRONZE TAPE *
PART NO. DA6655

All underground signal cable consist of solid copper conductors with AAR class A insulationm,90C rating, 10 mil bronze tape and polyethylene insulation.

TRACK WIRE:

1 CONDUCTOR NO. 9 SOLID POLYETHYLENE INSULATION
PART NO. DA6600

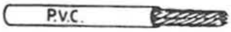
2 CONDUCTOR NO. 9 SOLID TWISTED POLYETHYLENE INSULATION
PART NO. DA6601

1 CONDUCTOR NO. 6 SOLID POLYETHYLENE INSULATION
PART NO. DA6605

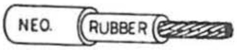
2 CONDUCTOR NO. 6 SOLID TWISTED POLYETHYLENE INSULATION *
PART NO. DA6606

BONDSTRAND:

5/64" PVC INSULATION TINNED BONDSTRAND *
PART NO. DA6626



.080" RUBBER AND .060" NEOPRENE INSULATION
TINNED BONDSTRAND
PART NO. DA6629 *



L & W INDUSTRIES

ELECTRONIC COMPONENTS

J
J
J
J
J
J
J
J
J

HIGHWAY CROSSING POWER PACK
TRACK RECTIFIER
STICK RELEASE TIMER
LIGHTING TRANSFORMER

L & W INDUSTRIES

CX1 TYPE-C
HIGHWAY CROSSING
POWER PACK

The L&W CX1 Power pack was designed to provide power for four A.C.-D.C. track circuits. A.C.-D.C. track circuits, also referred to as Style "C" track circuits, have advantages which make them ideal for use at railroad-highway crossings in non-signaled territory and industrial environments. One advantage is that all power equipment, including batteries, can be located in one location. Another advantage is the improved shunting afforded by this type of track circuit. Normally the power for the track circuits is supplied from the commercial 110 volt, 60 HZ. A.C. source, stepped down to 6.3 volts by each of the four secondaries in the CX1 Power Pack. In the event of A.C. power failure, a power off relay transfers the supply for the transformer to an internal inverter which operates from a 10 to 12 volt battery. The amount of standby time is determined by the circuit load and the size of the battery. Each of the four secondaries has a capacity of 6.3 volts, 3.5 amperes. The solid state inverter has a capacity of 100 va.

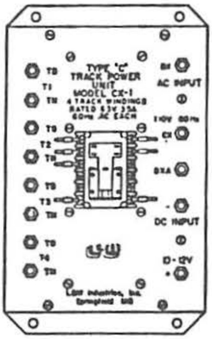
Combined and wired into one unit are the components to perform the functions which normally require one or two transformers, a power off relay and an inverter. AAR terminals are provided and clearly marked for the four secondaries, the D.C. input and the A.C. input. A terminal also is provided for an inverter output. The combined load for transformer secondaries and this connection must not exceed the 100 va rating of the inverter.

There are no adjustments required for the CX1 Power Pack. Inspection should be made occasionally of the inverter by opening the A.C. input and checking that the track output voltage is not appreciably reduced. If it is reduced, be sure that battery voltage is no lower than 10 volts. If battery is above 10 volts and track output voltage is low, CX1 must be replaced and repaired.

CX1 POWER PACK

HIGHWAY CROSSING POWER PACK:

CX1 POWER PACK INCLUDING POWER TRANSFER RELAY, WITH SOLID STATE INVERTER.
PART NO. EA2600-X


TYPE "C"
TRACK POWER
UNIT
MODEL CX-1
4 TRACK WINDINGS
RATED 6.3V 3.5A
60Hz AC EACH
T1
T2
T3
T4
AC INPUT
110V 60Hz
CX
BXA
DC INPUT
10-12V
L&W Industries, Inc.
Springfield MO

CX1 Power Pack is designed to provide power for four AC-DC Track Circuits, also referred to as Style C Track Circuits.

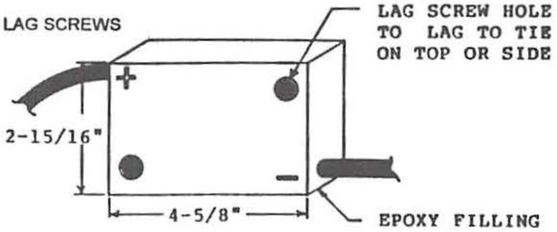
CX1 POWER TRANSFER RELAY:

CX1 POWER TRANSFER RELAY
PART NO. 9A2617

CX1 TRACK RECTIFIER

CX1 TRACK RECTIFIER:

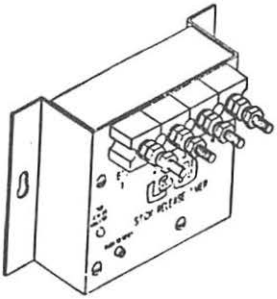
COMPLETE WITH TWO LAG SCREWS
PART NO. EA2610


LAG SCREW HOLE
TO LAG TO TIE
ON TOP OR SIDE
+
−
2-15/16"
4-5/8"
EPOXY FILLING

STICK RELEASE TIMER

STICK RELEASE TIMER:

TIME SETTINGS OF 2 TO 33 MINUTES
PART NO. EA2560-X


STICK RELEASE TIMER

L & W INDUSTRIES

LENSES
PROTECTORS
BULBS

WAYSIDE SIGNAL LENSES
HIGHWAYS CROSSING LENSES
MISCELLANEOUS LENSES
PRECISION SIGNAL BULBS
LENS PROTECTORS

WAYSIDE SIGNAL LENSES

INNER DOUBLET LENSES:

INNER DOUBLET LENS 3 5/8" DIA. WITH
5/8" FOCUS, PLASTIC

RED.	PART NO. 7B7510-R
YELLOW.	PART NO. 7B7510-Y
GREEN.	PART NO. 7B7510-G
LUNAR WHITE.	PART NO. 7B7510-LW

INNER DOUBLET LENS 5 1/2" DIA. WITH
1/2" FOCUS, PLASTIC

RED.	PART NO. 7B6690-R
YELLOW.	PART NO. 7B6690-Y
GREEN	PART NO. 7B6690-G
CLEAR	PART NO. 7B6690-C

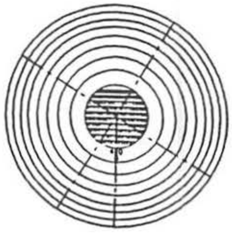
INNER DOUBLET LENS 5 1/2" DIA. WITH
1/2" FOCUS, GLASS

RED	PART NO. 7C4556-GR
YELLOW	PART NO. 7C4556-GY
GREEN	PART NO. 7C4556-GG
LUNAR WHITE	PART NO. 7C4556-GL
CLEAR	PART NO. 7C4556-GC

OUTER DOUBLET LENSES:

OUTER DOUBLET LENS 6 3/8" DIA. WITH
3 3/4" FOCUS, PLASTIC CLEAR.
PART NO. 7B6560-C

OUTER DOUBLET LENS 8 3/8" DIA. WITH
4" FOCUS, PLASTIC CLEAR.
NO DEFLECTING BULLSEYE.
PART NO. 7B4554-C
40 DEGREE DEFLECTING BULLSEYE.
PART NO. 7B4554-40C



OUTER DOUBLET LENS 8 3/8" DIA. WITH
4" FOCUS, GLASS CLEAR. 40 DEGREE
DEFLECTING BULLSEYE.
PART NO. 7C4554-GC

OUTER DOUBLET LENS 8 3/8" DIA. WITH
5" FOCUS, PLASTIC CLEAR.
NO DEFLECTING BULLSEYE
PART NO. 7B6450-C
40 DEGREE DEFLECTING BULLSEYE.
PART NO. 7B6450-40C

OUTER DOUBLET LENS 8 3/8" DIA. WITH
5" FOCUS, GLASS CLEAR. 40 DEGREE
DEFLECTING BULLSEYE.
PART NO. 7C4592-GC

SIGNAL LENSES

INVERTED DOUBLET LENSES:
INVERTED DOUBLET LENS 5 5/8" DIA. WITH 2 1/4" FOCUS, PLASTIC CLEAR.
PART NO. 7B670-1-C

INVERTED DOUBLET LENS 5 5/8" DIA. WITH 2 1/4" FOCUS, PLASTIC CLEAR. FROSTED BULLSEYE.
PART NO. 7B670-1-C-F

OUTER DOUBLET SPREADLIGHT LENS:
OUTER DOUBLET LENS 8 3/8" DIA. WITH 4" FOCUS, PLASTIC CLEAR. 30 DEGREE SPREADLIGHT.
PART NO. 7B6450-30-C

OUTER DOUBLET LENS 6 3/8" DIA. WITH 3 3/4" FOCUS, PLASTIC CLEAR. 30 DEGREE SPREADLIGHT.
PART NO. 7180-30-R

30 DEGREE SPREADLIGHT WITH 10 DEGREE DEFLECTION LENS. 5 3/8" DIA. WITH 3 1/2" FOCUS. PLASTIC

RED	PART NO. 7B60-1-R
YELLOW	PART NO. 7B60-1-Y
GREEN	PART NO. 7B60-1-G
LUNAR WHITE	PART NO. 7B60-1-LW
CLEAR	PART NO. 7B60-1-C
BLUE	PART NO. 7B60-1-B
PURPLE	PART NO. 7B60-1-P
LIGHT RED	PART NO. 7B60-R-H

Light red is equal to highway crossing lenses.

CONVEX LENS, 20 DEGREE VERTICAL 18 DEGREE HORIZONTAL. 5 3/8" DIA. PLASTIC.

RED	PART NO. 7B770-2-R
YELLOW	PART NO. 7B770-2-Y
GREEN	PART NO. 7B770-2-G
LUNAR WHITE	PART NO. 7B770-2-LW
CLEAR	PART NO. 7B770-2-C

FLAT 20 DEGREE VERTICAL 18 DEGREE HORIZONTAL LENS 5 3/8" DIA. PLASTIC.

CLEAR	PART NO. 7B870-3-C
RED	PART NO. 7B870-3-R
YELLOW	PART NO. 7B870-3-Y
GREEN	PART NO. 7B870-3-G
LUNAR WHITE	PART NO. 7B870-3-LW

FLAT 10 DEGREE DEFLECTING LENS WITH PLAIN CENTER 8 3/8" DIA. PLASTIC CLEAR WITH BLACK CENTER.
PART NO. 7B6680-C-BT

SIGNAL LENSES

CONVEX, SEMAPHORE LENSES:

CONVEX, SEMAPHORE LENS 5 3/8" DIA. PLASTIC

YELLOW	PART NO. 7B7111-Y
GREEN	PART NO. 7B7111-G
LUNAR WHITE	PART NO. 7B7111-LW
CLEAR	PART NO. 7B7111-C
RED	PART NO. 7B7111-R

CONVEX, SEMAPHORE LENS 8 3/8" DIA. PLASTIC.

RED	PART NO. 7B4951-R
YELLOW	PART NO. 7B4951-Y
GREEN	PART NO. 7B4951-G
LUNAR WHITE	PART NO. 7B4951-LW
CLEAR	PART NO. 7B4951-C

SIGNAL LENSES

OPTICAL LENSES:

OUTER DOUBLET OPTICAL LENS 6 3/8" DIA.
WITH 3 3/4" FOCUS, PLASTIC CLEAR.
PART NO. 7B6560-C

OPTICAL LENS 4 1/2" DIA. WITH
3" FOCUS, PLASTIC

RED	PART NO. 7B26901-R
YELLOW	PART NO. 7B26901-Y
GREEN	PART NO. 7B26901-G
BLUE	PART NO. 7B26901-B
CLEAR	PART NO. 7B26901-C

OPTICAL LENS 5 3/8" DIA. WITH
3 1/2" FOCUS, PLASTIC

RED	PART NO. 7B64-3-R
YELLOW	PART NO. 7B64-3-Y
GREEN	PART NO. 7B64-3-G
LUNAR WHITE	PART NO. 7B64-3-LW
CLEAR	PART NO. 7B64-3-C
BLUE	PART NO. 7B64-3-B
PURPLE	PART NO. 7B64-3-P

OPTICAL LENS 8 3/8" DIA. WITH
5" FOCUS, PLASTIC CLEAR.
PART NO. 7B7150-C

OPTICAL-GROUND DOWN LENS 5" DIA. PLASTIC

RED	PART NO. 7B60-1-R-GD
YELLOW	PART NO. 7B60-1-Y-GD
GREEN	PART NO. 7B60-1-G-GD

OPTICAL 40 DEGREE LENS 8 3/8" DIA.
WITH 5" FOCUS, PLASTIC CLEAR
PART NO. 7B4592-C

OPTICAL 40 DEGREE DEFLECTING BULLSEYE
LENS. 6 3/8" DIA. WITH 3 3/4" FOCUS.
PLASTIC CLEAR.
PART NO. 7B6570-C

OPTICAL 40 DEGREE DEFLECTING BULLSEYE
LENS. 8 3/8" DIA. WITH 5" FOCUS. PLASTIC CLEAR.
PART NO. 7B7150-40-C

FLAT PLAIN LENSES:

FLAT PLAIN LENS 8 3/8" DIA. 1/4" THICK.
PLASTIC CLEAR.
PART NO. 7B73-8-S

FLAT PLAIN LENS 4 1/2" DIA. 1/8" THICK
PLASTIC CLEAR.
PART NO. 7B73-4-S

HIGHWAY CROSSING LENSES

8 INCH HIGHWAY CROSSING LENSES:
CONVEX HIGHWAY CROSSING LENS 8 3/8" DIA. *
15 DEGREE DEFLECTION. 30 DEGREE
SPREADLIGHT. PLASTIC RED.
PART NO. 7B5092

CONVEX HIGHWAY CROSSING LENS 8 3/8" DIA.
20 DEGREE SPREADLIGHT WITH HOT SPOT
BULLSEYE. PLASTIC RED.
PART NO. 7B5091

CONVEX HIGHWAY CROSSING LENS 8 3/8" DIA.
32 DEGREE DEFLECTION. 20 DEGREE
SPREADLIGHT. PLASTIC RED.
PART NO. 7B5093

CONVEX HIGHWAY CROSSING LENS 8 3/8" DIA.
70 DEGREE SPREADLIGHT. PLASTIC RED.
PART NO. 7B5094

CONVEX HIGHWAY CROSSING LENS 8 3/8" DIA.
15 DEGREE DEFLECTION. 30 DEGREE
SPREADLIGHT. PLASTIC

YELLOW	PART NO. 7B5092-Y
GREEN	PART NO. 7B5092-G

12 INCH HIGHWAY CROSSING LENSES:
CONVEX HIGHWAY CROSSING LENS 12" DIA. *
15 DEGREE DEFLECTION. 30 DEGREE
SPREADLIGHT. PLASTIC RED.
PART NO. 7B5292

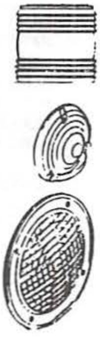
CONVEX HIGHWAY CROSSING LENS 12" DIA.
20 DEGREE DEFLECTION. 32 DEGREE
SPREADLIGHT. PLASTIC RED.
PART NO. 7B5295

CONVEX HIGHWAY CROSSING LENS 12" DIA.
70 DEGREE SPREADLIGHT. PLASTIC RED.
PART NO. 7B5294

GATEARM LAMP LENSES:
GATEARM LAMP LENS 360 DEGREE
FRESNEL. PLASTIC RED.
PART NO. 7B360F-R

GATEARM LAMP LENS 4" DIA. *
PLASTIC RED.
PART NO.

GATEARM LAMP LENS 7" DIA.
PLASTIC RED.
PART NO.



PRECISION SIGNAL BULBS

GENERAL ELECTRIC BULBS:

10 VOLT 18 WATT SINGLE CONTACT *
BAYONET BASE BULB PRECISION
SINGLE FILAMENT.
PART NO. ZA5008

10 VOLT 25 WATT SINGLE CONTACT *
BAYONET BASE BULB PRECISION
SINGLE FILAMENT
PART NO. ZA5008-1

10 VOLT 18 WATT/3.5 WATT SINGLE
CONTACT BAYONET BASE BULB.
DUAL FILAMENT.
PART NO. ZA5008-2

10 VOLT 13 WATT/3.5 WATT SINGLE
CONTACT BAYONET BASE BULB.
DUAL FILAMENT.
PART NO. ZA5008-6

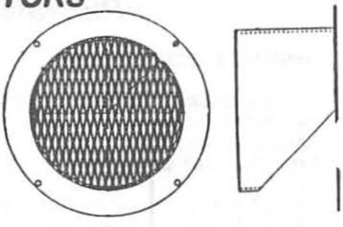
G.E.M. PRECISION BULBS:

L & W ECONOMY SIGNAL BULB:

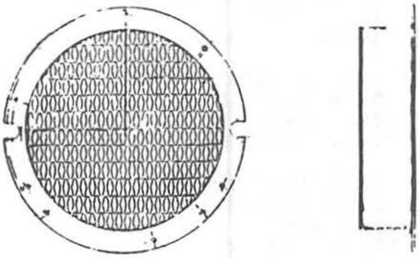
LENS PROTECTORS

LENS PROTECTORS FOR COLORLIGHT SIGNALS;

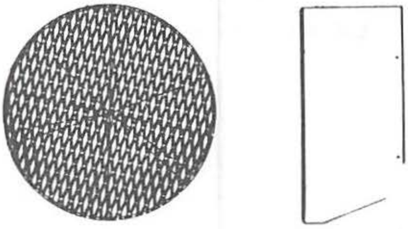
**LENS PROTECTOR FOR SAFETRAN
CLS-20 STYLE SIGNAL.
PART NO. 5Z1701**



**LENS PROTECTOR FOR U.S & S TYPE
P5, R2, AND TP5 COLORLIGHT SIGNALS.
PART NO. 5Z1781**

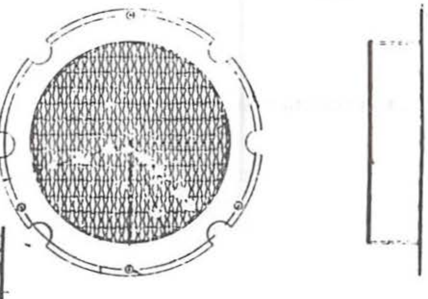


**LENS PROTECTOR FOR SAFETRAN
CLS-10 STYLE SIGNAL.
PART NO. 5Z1783**

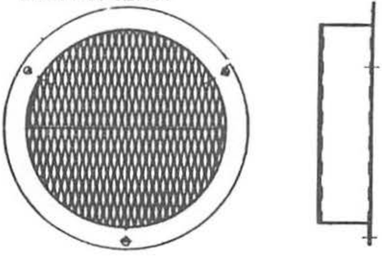


**LENS PROTECTOR FOR GRS TYPE "D"
COLORLIGHT SIGNAL.
PART NO. 5Z1784**

**LEN PROTECTOR FOR SAFETRAN IW10
COLORLIGHT SIGNAL.
PART NO. 5Z1787**



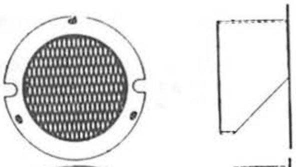
**LENS PROTECTOR FOR L & W , ALL
8 3/8" COLORLIGHTS.
PART NO. 5Z1801**



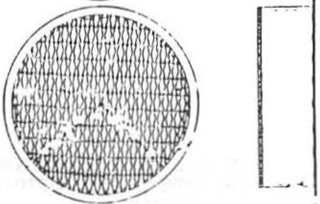
LENS PROTECTORS

DWARF SIGNAL LENS PROTECTORS:

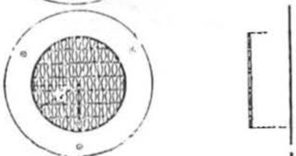
LENS PROTECTOR FOR U.S.& S. STYLE N2, AND L & W 6 3/8" ASPECT DWARF SIGNAL.
PART NO. 5Z1780



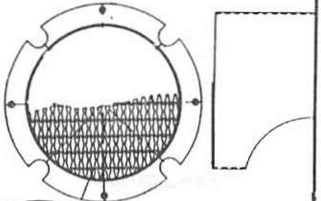
LENS PROTECTOR FOR G.R.S. STYLE ME, AND MF DWARF SIGNALS.
PART NO. 5Z1784



LENS PROTECTOR FOR G.R.S. STYLE P SIGNAL.
PART NO. 5Z1785

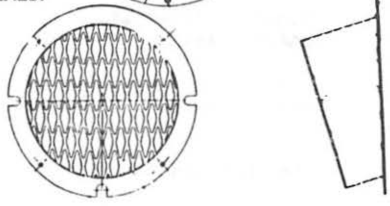


LENS PROTECTOR FOR DWARF SIGNAL
PART NO. 5Z1789

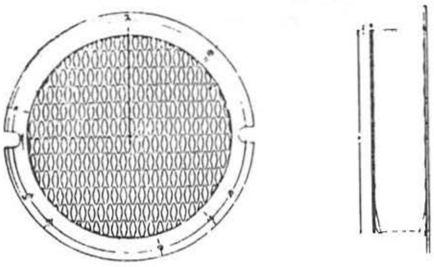


LENS PROTECTORS FOR SEARCHLIGHT SIGNALS:

LENS PROTECTOR FOR G.R.S. SA-1, U.S. & S. H2 AND H5. WITH SLANTED FRONT.
PART NO. 5Z1782



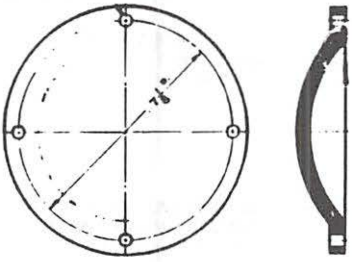
LENS PROTECTOR FOR G.R.S. SA-1, U.S. & S. H2 AND H5.
PART NO. 5Z1781



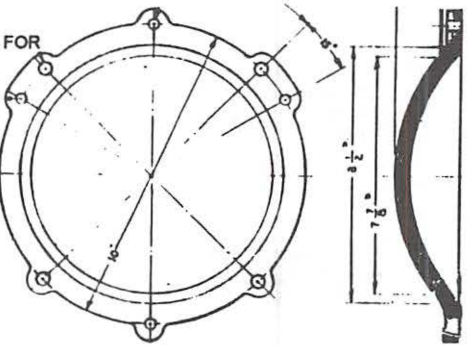
LEXAN LENS PROTECTOR

LEXAN LENS PROTECTORS, FOR COLORLIGHTS:

LEXAN 10" LENS PROTECTOR CONVEX FOR ALL U.S. & S AND L & W COLORLIGHTS.
PART NO. 7B77-1-P



LEXAN 10" LENS PROTECTOR CONVEX FOR GRS TYPE "D" AND SAFETRAN CLS10 COLORLIGHTS.
PART NO. 7B80-2-P



REFLECTORS

12" REFLECTORS:

GLASS DEEP DISH *
PART NO. 6B6206

GLASS SHALLOW DISH *
PART NO. 6B5206

8" REFLECTORS:

GLASS
PART NO. 6B5006

TRACK CONNECTION MATERIALS

- SPLICING SLEEVES
- REDUCING SLEEVES
- RETAINING CLIPS
- PLUG BONDS
- WELD BONDS
- HEAT SHRINK TUBING
- BOOTLEG TERMINATION ASSEMBLIES
- BOOTLEG PIPE & HOSE
- SHUNT HOUSINGS
- CABLE COVER PLATES
- STAPLES
- BONDING DRILLS & BITS
- GROUND RODS
- GROUNDING MATERIALS

L L L L L L L

SPLICING SLEEVES

TRACK CONNECTION SLEEVES:

REDUCING SLEEVE 3/16" TO #9 OR #10
SOLID AWG COPPER.
PART NO. BA2314-J *

REDUCING SLEEVE 3/16" TO #8 SOLID
OR #9 STRANDED AWG.
PART NO. BA2364-J *

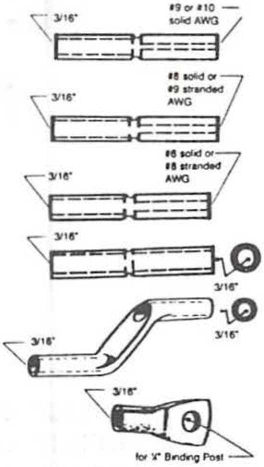
REDUCING SLEEVE 3/16" TO #6 SOLID
OR #8 STRANDED AWG.
PART NO. BA2363-J *

SPLICING SLEEVE 3/16" TO 3/16"
BONDSTRAND TO BONDSTRAND.
PART NO. BA2367-J *

DEAD END SLEEVE 3/16" TO 3/16"
BONDSTRAND TO BONDSTRAND.
PART NO. BA2936-J

TERMINAL LUG 3/16" TO 1/4" TERMINAL
POST MOUNTING.
PART NO. BA2412-J

REDUCING SLEEVES



SPLICING SLEEVES FOR SOLID COPPER CONDUCTOR:

PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE
BA1-102J	10	J
BA1-114J	9	J
BA1-128J	8	J
BA1-128M	8	M
1-144J	7	J
1-162J	6	J
1-162M	6	M

SPLICING SLEEVE FOR SOLID COPPER COVERED STEEL (COPPERWELD) CONDUCTOR:

PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE
BA1-102J	10	J
BA1-114J	9	J
BA3-128J	8	J
BA1-128M	8	M
BA1-128P	8	P
BA1-144M	7	M
BA1-144P	7	P
BA1-162P	6	P

REDUCING SLEEVE FOR SOLID COPPER AND SOLID COPPER COVERED STEEL (COPPERWELD) CONDUCTOR:

PART NUMBER	CONDUCTOR SIZE from	CONDUCTOR SIZE to (awg)	TOOL GROOVE
BA1-102X080J	10	12	J
BA1-114X102J	9	10	J
BA1-128X080J	8	12	J
BA1-128X102J	8	10	J
BA1-128X114J	8	9	J
BA1-162X080J	6	12	J
BA1-162X102J	6	10	J
BA1-162X114J	6	9	J
BA1-162X128J	6	8	J
BA1-162X128M	6	8	M
BA1-162X128P	6	8	P

SPLICING SLEEVES

TELEPHONE DROP, BRIDLE AND INSIDE WIRE SPLICING SLEEVES FOR SOLID COPPER COVERED STEEL (COPPERWELD) WIRE:

PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE	PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE
BA1-025A	24,22	A	BA3-051B	16	B
BA3-036A	22,20,19	A	BA3-064B	14	B
BA3-045B	19,18,17	B			

SPLICING SLEEVES F/ SOLID COPPER COVERED STEEL(COPPERWELD)CONDUCTOR:

PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE	PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE
BA1-025A	24	A	BA1-080D	12	D
BA3-032A	21,20	A	BA1-080E	12	E
BA3-045B	19,18,17	B	BA3-102D	10	D
BA3-051B	17,16	B	BA1-102J	10	J
BA1-064C	14	C	BA1-114J	9	J
BA1-064D	14	D	BA3-128J	9	J

REDUCING SLEEVE FOR SOLID COPPER WIRE AND SOLID COPPER COVERED STEEL (COPPERWELD) WIRE:

PART	CONDUCTOR SIZE		TOOL	PART	CONDUCTOR SIZE		TOOL
NUMBER	from	to (awg)	GROOVE	NUMBER	from	to (awg)	GROOVE
BA2-045X036B	18,17	22,20,19	B	BA1-114X051D	10	10	D
BA2-051X036B	16	22,20,19	B	BA1-114X064D	9	14	D
BA3-051X040B	14	18	B	BA1-114X064E	9	14	D
BA1-064X036C	14	22,20,19	B	BA1-114X080D	9	12	D
BA1-064X045C	14	18,17	B	BA1-114X102D	9	10	D
BA3-064X051B	14	16	B	BA1-128X051E	8	16	E
BA1-080X036C	12	22,20,19	C	BA1-128X064D	8	14	D
BA1-080X045C	12	18,17	C	BA1-128X080E	8	12	E
BA1-080X045D	12	18,17	D	BA1-128X102E	8	10	E
BA1-080X051C	12	16	C	BA1-128X114E	8	9	E
BA1-080X064C	12	14	C	BA1-102X064J	10	14	J
BA1-080X064D	12	14	D	BA1-114X051J	9	16	J
BA1-102X036C	10	22,20,19	C	BA1-114X064J	9	14	J
BA1-102X045C	10	18,17	C	BA1-114X102J	9	10	J
BA1-102X051C	10	18,17	C	BA1-128X051J	8	16	J
BA1-102X051D	10	16	D	BA1-128X064J	8	14	J
BA1-102X064C	10	14	C	BA1-128X080J	8	12	J
BA1-102X064D	10	14	D	BA1-128X102J	8	10	J
BA1-102X064E	10	14	E	BA1-128X114J	8	9	J
BA1-102X080C	10	12	C	BA1-162X064J	6	14	J
BA1-102X080D	10	12	D	BA1-162X080J	6	12	J
BA1-114X045D	9	18,17	D	BA1-162X102J	6	10	J
				BA1-162X114J	6	9	J

REDUCING SLEEVE FOR SOLID GALVANIZED STEEL WIRE:

PART	CONDUCTOR SIZE		TOOL	PART	CONDUCTOR SIZE		TOOL
NUMBER	from	to(awg)	GROOVE	NUMBER	from	to(awg)	GROOVE
BA4-109X083C	12	14	C	BA2-148X134J	9	10	J
BA2-109X083D	12	14	D	BA2-165X109J	8	12	J
BA2-134X083J	10	14	J	BA2-165X134J	8	10	J
BA2-134X109J	10	12	J	BA2-165X148J	8	9	J
BA2-148X109J	9	12	J				

SPLICING SLEEVES

OFFSET DEAD-END SLEEVES FOR SOLID COPPER CONDUCTOR:

PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE	PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE
BA91-128J	8	J	BA91-162J	6	J

OFFSET DEAD-END SLEEVES FOR SOLID COPPER COVERED STEEL (COPPERWELD) CONDUCTOR:

PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE	PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE
BA91-128J	8	J	BA91-128P	8	P
BA91-128M	8	M	BA91-162P	6	J

SPLICING SLEEVES FOR SOLID COPPER WIRE:

PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE	PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE
BA1-025A	24,22	A	BA1-080D	12	D
BA3-036A	22,20,19	A	BA1-080E	12	E
BA3-045B	19,18,17	B	BA1-091C	11	C
BA3-051B	17,16	B	BA1-102C	10	C
BA1-051B	16	B	BA1-102D	10	D
BA3-064B	14	B	BA1-102E	10	E
BA4-064B	14	B	BA1-114D	9	D
BA1-064C	14	C	BA1-114E	9	E
BA1-064D	14	D	BA1-128E	8	E
BA2-072B	13	B	BA1-128J	8	J
BA1-080C	12	C			

SPLICING SLEEVES FOR SOLID COPPER COVERED STEEL (COPPERWELD) CONDUCTOR:

PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE	PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE
BA1-025A	24	A	BA1-080D	12	D
BA3-032A	21,20	A	BA1-080E	12	E
BA3-045B	19,18,17	B	BA3-102D	10	D
BA3-051B	17,16	B	BA1-102J	10	J
BA1-064C	14	C	BA1-114J	9	J
BA1-064D	14	D	BA3-128J	9	J

NICOTAP SLEEVES FOR SOLID COPPER AND COPPER COVERED STEEL (COPPERWELD) CONDUCTOR:

PART NUMBER	CONDUCTOR SIZE from	to (awg)	TOOL GROOVE	PART NUMBER	CONDUCTOR SIZE from	to (awg)	TOOL GROOVE
BAT1-128X102J	8	10	J	BAT1-162X114J	6	9	J
BAT1-128X114J	8	9	J	BAT1-162X128J	6	8	J
BAT1-128J	8	8	J	BAT1-162J	6	6	J
BAT1-162X102J	6	10	J				

TELEPHONE DROP, BRIDLE AND INSIDE WIRE SPLICING SLEEVES FOR SOLID COPPER WIRE:

PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE	PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE
BA1-025A	24,22	A	BA3-051B	16	B
BA3-036A	22,20,19	A	BA3-064B	14	B
BA3-045B	19,18,17	B			

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SPLICING SLEEVES

REDUCING SLEEVES FOR GALVANIZED STEEL WIRE TO SOLID COPPER WIRE AND COPPER COVERED (COPPEREWELD) WIRE:

PART NUMBER	CONDUCTOR SIZE from	CONDUCTOR SIZE to (awg)	TOOL GROOVE	PART NUMBER	CONDUCTOR SIZE from	CONDUCTOR SIZE to (awg)	TOOL GROOVE
BA2-083X036C	14	22,20,19	C	BA2-134X051J	10	16	J
BA2-083X045C	14	18,17	C	BA2-134X064J	10	14	J
BA2-083X045D	14	18,17	C	BA2-134X102J	10	10	J
BA2-083X051C	14	16	C	BA2-148X051J	9	16	J
BA2-083X064C	14	14	C	BA2-148X064J	9	14	J
BA4-109X036C	12	22,20,19	C	BA2-148X080J	9	12	J
BA4-109X045C	12	18,17	C	BA2-148X102J	9	10	J
BA2-109X045D	12	18,17	D	BA2-148X114J	9	9	J
BA4-109X051C	12	16	C	BA2-165X051J	8	16	J
BA2-109X051D	12	16	D	BA2-165X064J	8	14	J
BA4-109X064C	12	14	C	BA2-165X102J	8	10	J
BA2-109X064D	12	14	D	BA2-165X114J	8	9	J
BA2-109D	12	10	D				

OFFSET DEAD-END SLEEVES FOR SOLID COPPER WIRE:

PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE	PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE
BA91-064C	14	C	BA91-102E	10	E
BA91-064D	14	D	BA91-114D	9	D
BA91-080C	12	C	BA91-114E	9	E
BA91-080D	12	D	BA91-128D	8	D
BA91-080E	12	E	BA91-128E	8	E
BA91-102C	10	C	BA91-114J	9	J
BA91-102D	10	D			

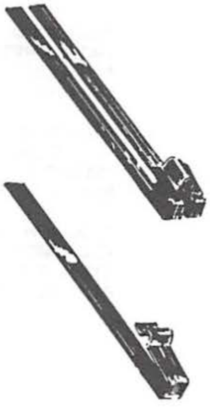
OFFSET DEAD-END SLEEVES F/SOLID COPPER COVERED STEEL(COPPERWELD)WIRE:

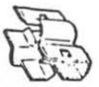
PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE	PART NUMBER	CONDUCTOR SIZE (AWG)	TOOL GROOVE
BA91-064C	14	C	BA91-102D	10	D
BA91-064D	14	D	BA91-080J	12	J
BA91-080C	12	C	BA91-102J	10	J
BA91-080D	12	D	BA91-114J	9	J
BA91-080E	12	E	BA91-128J	8	J

RETAINING CLIPS

RETAINING CLIPS (PERPENDICULAR):

RETAINING CLIP, PERPENDICULAR FOR BONDSTRAND WIRE. BARBED SPRING STEEL CONSTRUCTION.
PART NO. CA248B

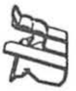




RETAINING CLIP, PERPENDICULAR FOR BONDSTRAND WIRE.
PART NO. CA2370

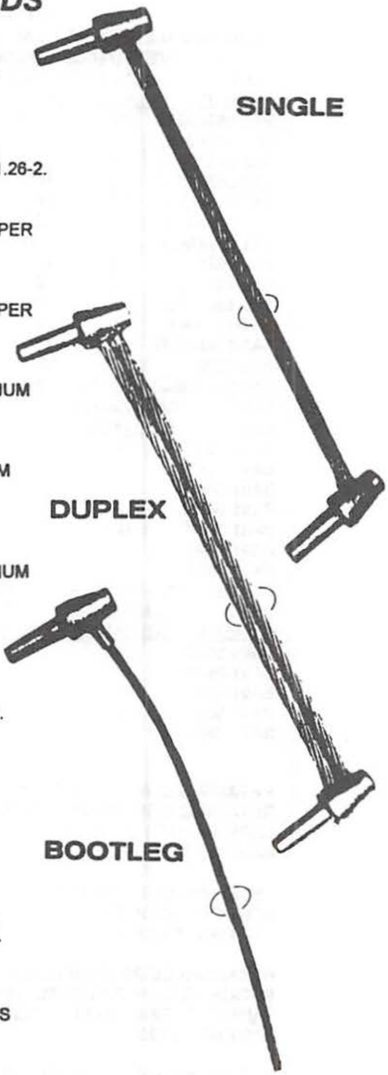
RETAINING CLIPS (PARALLEL):

RETAINING CLIP, PARALLEL FOR BONDSTRAND WIRE. BARBED SPRING STEEL CONSTRUCTION.
PART NO. CA251



RETAINING CLIP, PARALLEL FOR BONDSTRAND WIRE.
PART NO. CA2380

PLUG BONDS



PLUG BONDS, SINGLE CONDUCTOR:
PLUG BOND, .327" CONDUCTOR, WITH 1 COPPER, AND 6 GALVANIZED .109" WIRES. AAR 8.1.26-1.
PART NO. CAS-1T

PLUG BOND, .330" CONDUCTOR, WITH 3 COPPER, AND 16 GALVANIZED STEEL .0661" WIRES. AAR 8.1.26-2.
PART BO.. CAS-5T

PLUG BOND, .306" CONDUCTOR, WITH 7-40% COPPER COVERED STEEL .102" WIRES. AAR 8.1.26-3.
PART NO. CA7B-10BT

PLUG BOND, .243" CONDUCTOR, WITH 7-40% COPPER COVERED STEEL .081" WIRES. AAR 8.1.26-4.
PART NO. CA7B-12BT

PLUG BOND, .1875" CONDUCTOR, WITH 133 CADMIUM BRONZE .0125" WIRES. AAR 8.1.26-5.
PART NO. CAS-8T.

PLUG BOND, .251" CONDUCTOR, WITH 42 CADMIUM BRONZE, 91 HARD DRAWN STAINLESS STEEL .017" WIRES.
PART NO. CAS-12T

PLUG BOND, .1875" CONDUCTOR, WITH 133 CADMIUM BRONZE .0125" WIRES WITH 4/64" PVC JACKET. AAR 8.1.26-5.
PART NO. CAS-8TINS

PLUG BONDS, DUPLEX CONDUCTORS:
PLUG BOND, .231" DUPLEX CONDUCTORS, WITH 1 COPPER AND 6 GALVANIZED STEEL .077" WIRES. AAR 8.1.27-1.
PART NO. CADS-1T

PLUG BOND, .243" DUPLEX CONDUCTOR, WITH 7-40% COPPER COVERED STEEL .081" WIRES. AAR 8.1.27-2.
PART NO. CA14B-12BT

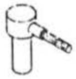
PLUG BONDS, BOOTLEG:
PLUG BOND, BOOTLEG, .1875" CONDUCTOR WITH 133 CADMIUM BRONZE .0125" WIRES. AAR 8.1.26-5.
PART NO. CAS-8TS

PLUG BOND, BOOTLEG, .251" CONDUCTOR WITH 42 CADMIUM BRONZE, 91 HARD DRAWN STAINLESS STEEL .017" WIRES.
PART NO. CAS-12TS

GROUNDING MATERIALS

WELDED GROUND ROD CONNECTION, SINGLE WIRE:

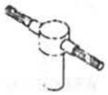
GROUND ROD	WIRE SIZES	TYPE	PART NUMBER
1/2"	#6, #8 SOLID #8 STRANDED	AR	CAMACP-AR12/A
1/2"	#3, #4 SOLID #4, #6 STRD	AR	CAMACP-AR12/B
1/2"	#1, #2 SOLID #2, #3 STRD	AR	CAMACP-AR12/C
5/8"	#6, #8 SOLID #8 STRANDED	AR	CAMACP-AR58/A
5/8"	#3, #4 SOLID #4, #6 STRD	AR	CAMACP-AR58/B
5/8"	#1, #2 SOLID #2, #3 STRD	AR	CAMACP-AR58/C
5/8"	2/0, 1/0 SOLID 1/0, 1 STRD	AR	CAMACP-AR58/D
5/8"	2/0 STRAND	AR	CAMACP-AR58/E
3/4"	#6, #8 SOLID #8 STRANDED	AR	CAMACP-AR34/A
3/4"	#3, #4 SOLID #4, #6 STRD	AR	CAMACP-AR34/B
3/4"	#1, #2 SOLID #2, #3 STRD	AR	CAMACP-AR34/C
3/4"	2/0, 1/0 SOLID 1/0, 1 STRAND	AR	CAMACP-AR34/D
3/4"	2/0 STRAND	AR	CAMACP-AR34/E



TYPE AR

WELDED GROUND ROD CONNECTION, DOUBLE WIRE:

GROUND ROD	WIRE SIZES	TYPE	PART NUMBER
1/2"	#6, #8 SOLID #8 STRANDED	T	CAMACP-T12/A
1/2"	#3, #4 SOLID #4, #6 STRD	T	CAMACP-T12/B
1/2"	#1, #2 SOLID #2, #3 STRD	T	CAMACP-T12/C
5/8"	#6, #8 SOLID #8 STRANDED	T	CAMACP-T58/A
5/8"	#3, #4 SOLID #4, #6 STRD	T	CAMACP-T58/B
5/8"	#1, #2 SOLID #2, #3 STRD	T	CAMACP-T58/C
5/8"	2/0, 1/0 SOLID 1/0, 1 STRD	T	CAMACP-T58/D
3/4"	#6, #8 SOLID #8 STRANDED	T	CAMACP-T34/A
3/4"	#3, #4 SOLID #4, #6 STRD	T	CAMACP-T34/B
3/4"	#1, #2 SOLID #2, #3 STRD	T	CAMACP-T34/C
3/4"	2/0, 1/0 SOLID 1/0, 1 STRAND	T	CAMACP-T34/D

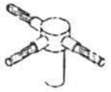


TYPE T

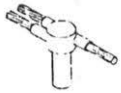
GROUNDING MATERIALS

WELDED GROUND ROD CONNECTION, TRIPLE WIRE:

GROUND ROD	WIRE SIZES	TYPE	PART NUMBER
1/2"	#6, #8 SOLID #8 STRANDED	TT	CAMACP-TT12/A
1/2"	#6, #8 SOLID #8 STRANDED	TD	CAMACP-TD12/A
1/2"	#3, #4 SOLID #4, #6 STRD	TT	CAMACP-TT12/B
1/2"	#3, #4 SOLID #4, #6 STRD	TD	CAMACP-TD12/B
1/2"	#1, #2 SOLID #2, #3 STRD	TT	CAMACP-TT12/C
5/8"	#6, #8 SOLID #8 STRANDED	TT	CAMACP-TT58/A
5/8"	#6, #8 SOLID #8 STRANDED	TD	CAMACP-TD58/A
5/8"	#3, #4 SOLID #4, #6 STRD	TT	CAMACP-TT58/B
5/8"	#3, #4 SOLID #$, #6 STRD	TD	CAMACP-TD58/B
5/8"	#1, #2 SOLID #2, #3 STRD	TT	CAMACP-TT58/C
5/8"	#1, #2 SOLID #2, #3 STRD	TD	CAMACP-TD58/C
3/4"	#6, #8 SOLID #8 STRANDED	TT	CAMACP-TT34/A
3/4"	#6, #8 SOLID #8 STRANDED	TD	CAMACP-TD34/A
3/4"	#3, #4 SOLID #4, #6 STRD	TT	CAMACP-TT34/B
3/4"	#3, #4 SOLID #4, #6 STRD	TD	CAMACP-TD34/B
3/4"	#1, #2 SOLID #2, #3 STRD	TT	CAMACP-TT34/C
3/4"	#1, #2 SOLID #2, #3 STRD	TD	CAMACP-TD34/D



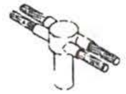
TYPE TT



TYPE TD

WELDED GROUND ROD CONNECTION, QUAD WIRE:

GROUND ROD	WIRE SIZES	TYPE	PART NUMBER
1/2"	#6, #8 SOLID #8 STRANDED	DD	CAMACP-DD12/A
1/2"	#3, #4 SOLID #4, #6 STRD	DD	CAMACP-DD12/B
5/8"	#6, #8 SOLID #8 STRANDED	DD	CAMACP-DD58/A
5/8"	#3, #4 SOLID #4, #6 STRD	DD	CAMACP-DD58/B
5/8"	#1, #2 SOLID #2, #3 STRD	DD	CAMACP-DD58/C
3/4"	#6, #8 SOLID #8 STRANDED	DD	CAMACP-DD34/A
3/4"	#3, #4 SOLID #4, #6 STRD	DD	CAMACP-DD34/B
3/4"	#1, #2 SOLID #2, #3 STRD	DD	CAMACP-DD34/C

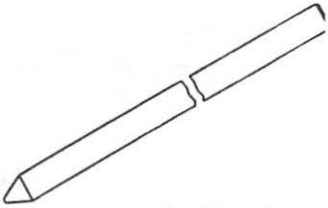


TYPE DD

GROUNDING MATERIALS

GROUND RODS:

COPPER COATED GROUND RODS:
GROUND ROD 5/8" DIAMETER, STEEL *
COPPER COATED, 8' LONG.
PART NO. FA70400



GROUND ROD 5/8" DIAMETER, STEEL *
COPPER COATED, 10' LONG.
PART NO. FA70400-1

GROUND ROD 3/4" DIAMETER, STEEL
COPPER COATED, 10' LONG.
PART NO. FA70424

GROUND WIRE:

GROUND WIRE, #6 BARE SOLID COPPER
(SPECIFY LENGTH WHEN ORDERING)
PART NO. DA6422

GROUND ROD CLAMPS:

GROUND ROD CLAMP FOR 5/8" GROUND ROD
PART NO.

GROUND ROD CLAMP FOR 3/4" GROUND ROD
PART NO.

FIELD MADE BONDS

FIELD MADE BONDS:

BONDSTRAND, BARE 3/16"
PART NO. DA6628

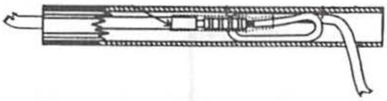
WELD METAL NO. 25 CARTRIDGE *
PART NO. CA25

WELD METAL NO. 32 CARTRIDGE
PART NO. CA32

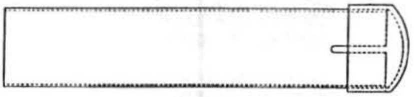
COPPER SLEEVE FOR FIELD MADE
BOND WIRES, 3/16"
PART NO. 3/4"L=CA11C *

1"L=CA12C *

BOOTLEG HOSE AND PIPE

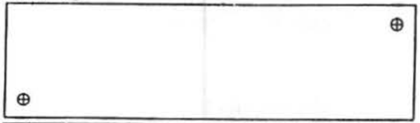


BOOTLEG HOSE:
1 3/8" X 18" REINFORCED RUBBER HOSE. DRILLED FOR SIDE WIRE ACCESS.
PART NO. CA1755

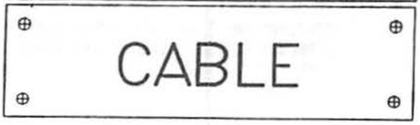


BOOTLEG PIPE:
3" PVC PIPE 18" LONG. SLOT FOR SIDE WIRE ACCESS WITH PVC CAP.
PART NO. CA1727-X

CABLE PLATES



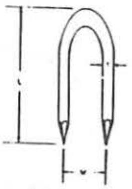
CABLE PLATE:
6" X 24" X 1/4" STEEL PLATE WITH 9/16" HOLES FOR LAG SCREWS.
PART NO.



6" X 24" X 1/4" STEEL PLATE WITH "CABLE" STAMPED ON THE PLATE. 9/16" HOLES FOR LAG SCREWS.
PART NO.

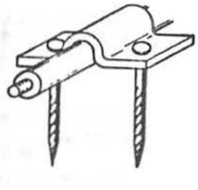
STAPLES

COPPER STAPLES:
Staples listed below are copper coated diamond point. Standard package of 100/box.

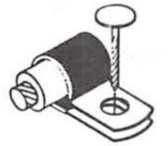


1 1/2" L X 5/16" W X 0.144 T	CA1762	
1 3/4" L X 3/8" W X 0.144 T	CA1763	
2" L X 1/2" W X 0.162 T	CA1764	*
2" L X 1 1/16" W X 0.162 T	CA1765	
3" L X 1" W X 0.250 T	CA1766	

BONDSTRAND STAPLES: *
POLYPROPYLENE PLASTIC WITH (2) SPIRAL LAG NAILS.
PART NO. CA1777-X



PLATED METAL, INSULATED LOOP WITH (1) SPIRAL LAG NAIL. *
PART NO. CA1775-X

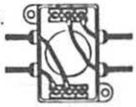


L & W INDUSTRIES

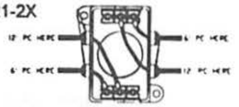
BOOTLEG TERMINATION ASSEMBLIES

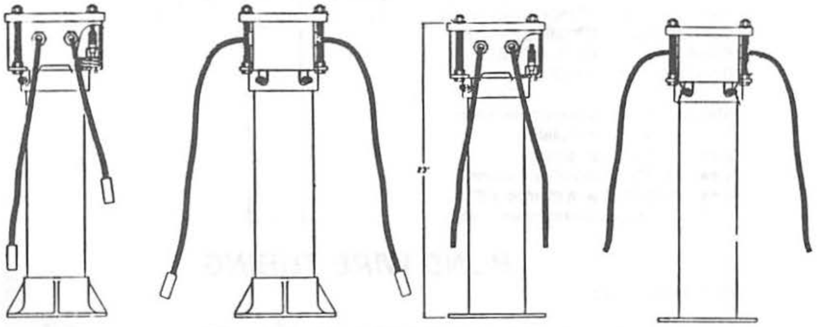
BOOTLEG TERMINATION HOUSINGS:

BOOTLEG TERMINATION HOUSING 4 WAY, WITH (2) 12' LENGTHS AND (2) 6' LENGTHS OF RUBBER/NEOPRENE BONDSTRAND WIRE. INCLUDING (4) COPPER HAMMER DIE WELD SLEEVES, AND (8) TERMINALS.
PART NO. CA1721-8X



BOOTLEG TERMINATION HOUSING 4 WAY, WITH (2) 12' LENGTHS AND (2) 6' LENGTHS OF PVC BONSTRAND WIRE.
PART NO. CA1721-2X

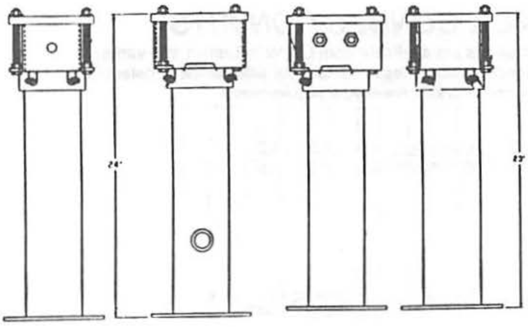


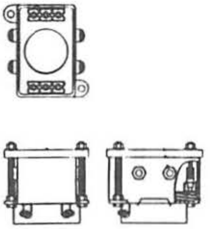


BOOTLEG TERMINAL HOUSING (2) WAY
PART NO. CA1721-X

BOOTLEG TERMINAL HOUSING (2) WAY
PART NO. CA1721-14X

BOOTLEG TERMINAL HOUSING (4) WAY
PART NO. CA1721-12X

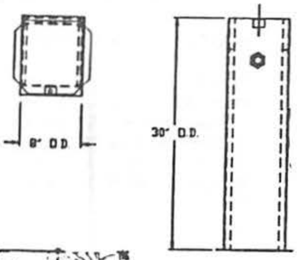




SHUNT HOUSINGS

GALVANIZED STEEL SHUNT HOUSINGS:

GALVANIZED STEEL SHUNT HOUSING
WITH LOCKABLE LID 8" X 8" X 30" TALL.
PART NO. CA2905-X

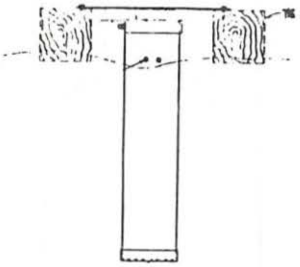


PVC TUBE SHUNT HOUSINGS:

PVC TUBE SHUNT HOUSING WITH
WATER TIGHT GROMMET WIRE
ENTRANCE. 8" DIA. X 40" TALL.
PART NO. CA1643-3X

Shipped with the following materials:

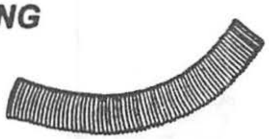
1 ea.	6" x 24" steel plate
2 ea.	1/2" x 4" lag screws
1 ea.	8" PVC cap with set screw
6 ea.	Insulated wire clamps 3/8" dia.
6 ea.	No. 6 galvanized spiral nails.



BOND WIRE TUBING

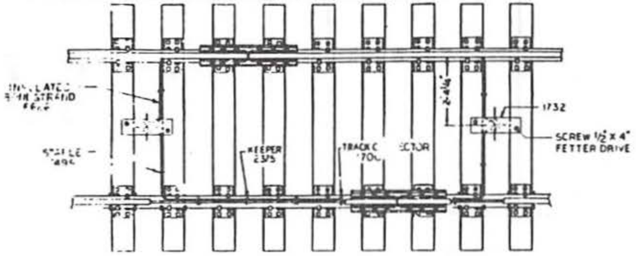
BOND WIRE TUBING:

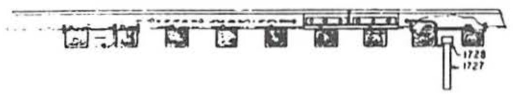
BOND WIRE TUBING 1/2" DIAMETER FIBERGLASS *
REINFORCED VINYL TUBING. FOR ADDITIONAL
BALLAST PROTECTING ON TRACK WIRES. 125 FT/RL.
PART NO. CA1751



TRACK CONNECTION KITS

Track connection kits are available from L & W Industries in a variety of customer specifications. Please contact our sales office to determine which Track connection kits, meet your requirements.





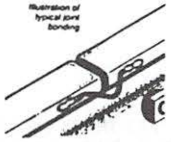
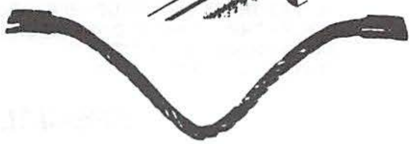


Illustration of typical joint bonding

WELD BONDS

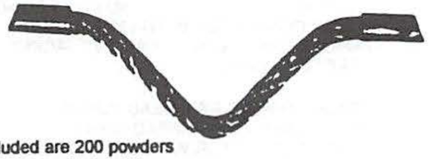
WELD BONDS, RAIL HEAD:
WELD BOND, RAIL HEAD WITH NO. 25 *
POWDER CARTRIDGE. 3/16" DIAMETER
BOND 6 1/2" LONG.
PART NO. CATHD-6



WELD BOND, RAIL HEAD WITH NO. 25
POWDER CARTRIDGE. 3/16" DIAMETER
BOND 7 1/2" LONG.
PART NO. CATHD-7

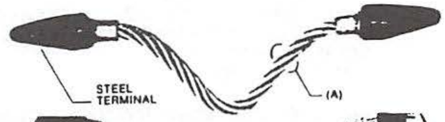
WELD BOND, RAIL HEAD WITH NO. 25
POWDER CARTRIDGE. 3/16" DIAMETER
BOND 9 3/4" LONG.
PART NO. CATHD-9

WELD BOND, RAIL HEAD WITH NO. 32
POWDER CARTRIDGE. 5/16" DIAMETER
BOND 7" LONG.
PART NO. CATHD-17

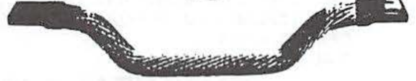


THD bonds are packed 100 bonds per box. Included are 200 powders in moisture-resistant boxes of 50 each, steel discs, a pair of molds, a flint gun, and a mold scraper. Other bond lengths are available at request.

ARC WELDED RAILHEAD BONDS:
ARC WELDED RAILHEAD BOND .3125"
CONDUCTOR WITH 61 COPPER, 72
GALVANIZED STEEL .0201" WIRES.
PART NO. CABD2

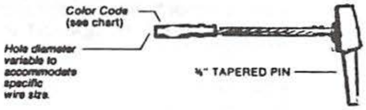

STEEL TERMINAL
(A)

POWDER RAILHEAD BONDS:
POWDER RAILHEAD BOND, 250 MCM
CAPACITY, 13" LONG.
PART NO. CAPBC-13



TRACK CIRCUIT CONNECTORS

SINGLE TRACK CIRCUIT CONNECTORS:
SINGLE TRACK CIRCUIT CONNECTOR
3/16" STRANDED WIRE SIZE. COLOR CODE PLAIN.
PART NO. CA1700 *


Color Code (see chart)
Hole diameter variable to accommodate specific wire size.
¼" TAPERED PIN

#10 STRANDED WIRE SIZE. COLOR CODE YELLOW.
PART NO. CA1700-10

#9 STRANDED WIRE SIZE. COLOR CODE RED.
PART NO. CA1700-9

#8 STRANDED WIRE SIZE. COLOR CODE GREEN.
PART NO. CA1700-8

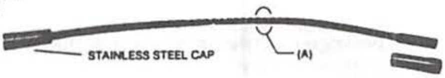
#6 STRANDED WIRE SIZE. COLOR CODE BLUE.
PART NO. CA1700-6

TRACK CIRCUIT CONNECTORS (CONT)

DUPLEX TRACK CIRCUIT CONNECTORS:
DUPLEX TRACK CIRCUIT CONNECTOR
3/16" STRANDED WIRE SIZE.
PART NO. CAD1700

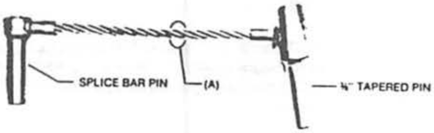
SPECIALTY BONDS

BEHIND THE SPLICE BAR AND FROG BONDS:
BEHIND THE SPLICE BAR AND FROG BOND
.1875" CONDUCTOR WITH 133 CADMIUM
BRONZE .0125" WIRES.
PART NO. CABSB-6CH

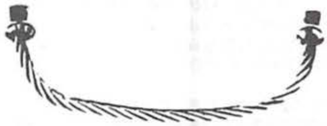


BEHIND THE SPLICE BAR AND FROG BOND
.1875" CONDUCTOR WITH 133 CADMIUM
BRONZE .0125" WIRES. 4/64" PVC JACKET.
PART NO. CABSB-6CHI

SPLICE BAR TO RAIL HEAD BONDS:
SPLICE BAR TO RAIL HEAD BOND
.1875" CONDUCTOR WITH 133 CADMIUM
BRONZE .0125" WIRES.
PART NO. CAS8TW



RAILHEAD PUNCH BONDS:
RAILHEAD PUNCH BOND .1875" CONDUCTOR
WITH 133 CADMIUM BRONZE .0125" WIRES,
OFFSET. AAR 8.1.36-1.
PART NO. CARHD-9



RAILHEAD PUNCH BOND .1875" CONDUCTOR
WITH 133 CADMIUM BRONZE .0125" WIRES,
CENTER. AAR 8.1.36-2.
PART NO. CARHD-10

HEAT SHRINK TUBING

HEAT SHRINK TUBING:
HEAT SHRINK TUBING .8" EXPANDED TO .22"
CONTRACTED. WITH SEALANT. 6" LONG.
PART NO. CA1760 *

HEAT SHRINK TUBING .50" EXPANDED 12" LONG.
PART NO. CA1749

HEAT SHRINK TUBING .375" EXPANDED 48" LONG.
PART NO. CA70663

HEAT SHRINK TUBING .500" EXPANDED 48" LONG.
PART NO. CA70664

HEAT SHRINK TUBING .750" EXPANDED 48" LONG.
PART NO. CA70665

L & W INDUSTRIES

POLELINE

HARDWARE

- EXPANDING ANCHORS
- TRANSPOSITION BRACKETS
- CROSSARM PINS
- TIE WIRES & INSULATORS
- CROSSARM BRACES
- MCKEEN BREAKARMS
- GUY & LASHING WIRE CLAMPS
- POLE SEATS
- CARRIAGE BOLTS

L&W IS AN AB CHANCE DISTRIBUTOR.

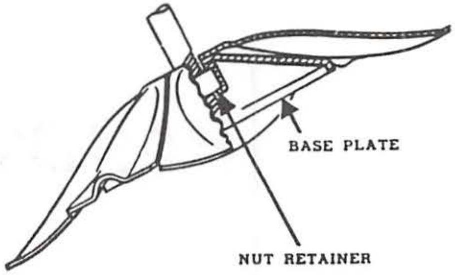
PLEASE CONTACT OUR SALES OFFICE FOR OTHER POLELINE REQUIREMENTS.

EXPANDING ANCHORS

8 WAY EXPANDING ANCHOR:

3/4" 8-WAY EXPANDING ANCHOR
WITH NUT RETAINER.
PART NO. FA88135

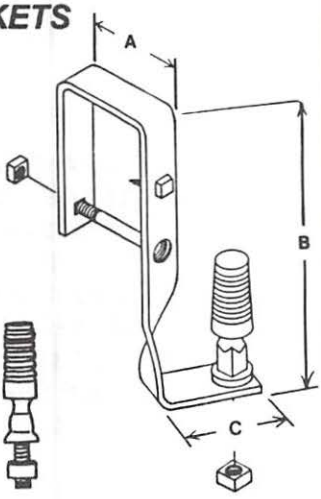
The 8-way expanding anchor has a 115 square inch load.



TRANSPOSITION BRACKETS

TRANSPOSITION BRACKETS:

SINGLE TRANSPOSITION BRACKET WITH
CARRIAGE BOLT. A=3 1/4" B=10 1/2" C=4 1/8"
PART NO. FA18251-X

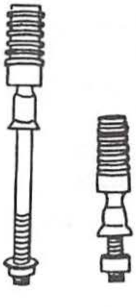


COMMUNICATION PINS:

COMMUNICATION PIN FOR METAL CROSSARM.
SHORT SHANK FOR 1" PIN TYPE INSULATOR.
PART NO. FA17010-X

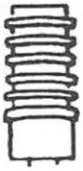
COMMUNICATION PIN FOR WOOD CROSSARM.
LONG SHANK FOR 1" PIN TYPE INSULATOR.
PART NO. FA17000-X

*



WOOD COB:

WOOD COB FOR 1" PIN TYPE INSULATOR.
PART NO. FA17003

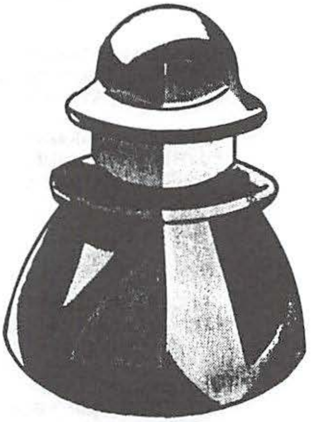


TIE WIRES

TIE WIRES:

#10 AWG TIE WIRE 30% HARD COPPER
2/64" INSULATION. 26" LONG.
PART NO. FA6460 *

INSULATORS

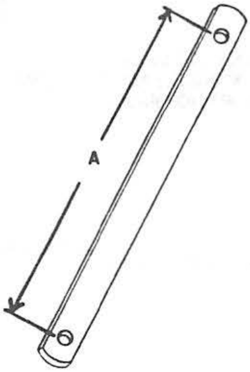


PLASTIC INSULATORS:

4" INSULATOR, 1" PIN HOLE SIZE.
OUTSIDE SKIRT 3 1/2" DIA.
1 5/8" GROOVE DIA.
PART NO. FA1800 *

The plastic insulator is unbreakable by small arms or rifle fire. The high impact, radio free design is superior to glass, or porcelain. It is rated at 4100lb/IN2 tensile strength with 500 megohms leakage resistance. 40,000 flash-over voltage, and 550 volts/mil dielectric strength.

CROSSARM BRACES



GALVANIZED STEEL CROSSARM BRACES:

26" FLAT CROSSARM BRACE 1/4" X 1 1/4"
PART NO. FA17126

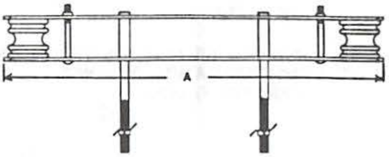
28" FLAT CROSSARM BRACE 1/4" X 1 1/4"
PART NO. FA17128

30" FLAT CROSSARM BRACE 1/4" X 1 1/4"
PART NO. FA17130

MCKEEN BREAKARMS

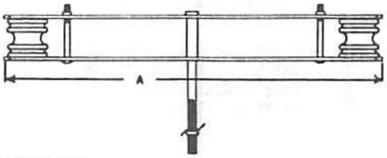
MCKEEN BREAKARMS:

MCKEEN BREAK ARM COMPLETE
WITH TWO MOUNTING BOLTS. A=22".
PART NO. FA15016-X



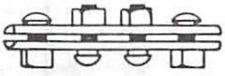
MCKEEN BREAKARM COMPLETE
WITH ONE MOUNTING BOLT. A=22".
PART NO. FA15019-X

MCKEEN BREAKARM COMPLETE
WITH ONE MOUNTING BOLT. A=12".
PART NO. FA15017-X

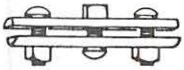


GUY CLAMPS

4 BOLT GUY CLAMP:
5/8" GUY CLAMP, 4 BOLT.
PART NO. FA6461

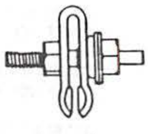


3 BOLT GUY CLAMP:
1/2" GUY CLAMP, 3 BOLT.
PART NO. FA6450



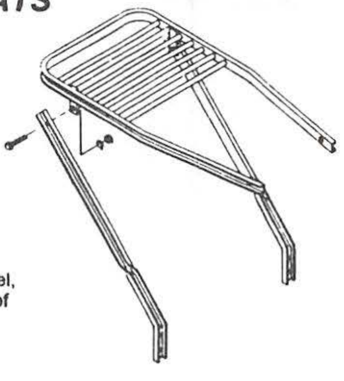
LASHING CLAMP

LASHING CLAMP:
3/8" WIRE, LASHING CLAMP.
PART NO. FA9000



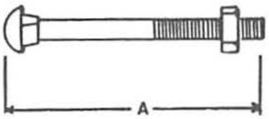
POLE SEATS

POLE SEAT:
GALVANIZED POLE SEAT ASSEMBLY.
PART NO. FA16550-X



Pole seat assemblies are produced from channel steel, and hot dipped galvanized. The seat has a capacity of 1500 pounds.

CARRIAGE BOLTS



- OPEN HEARTH STEEL
- HOT GALVANIZED

TO ORDER: Specify description and ordering reference

DESCRIPTION	ORDERING REFERENCE
3/8" Carriage Bolts have square nuts, finished points and rolled threads. A=4"	FA8634
3/8" Carriage Bolts have square nuts, finished points and rolled threads. A=6"	FA8646

L & W INDUSTRIES

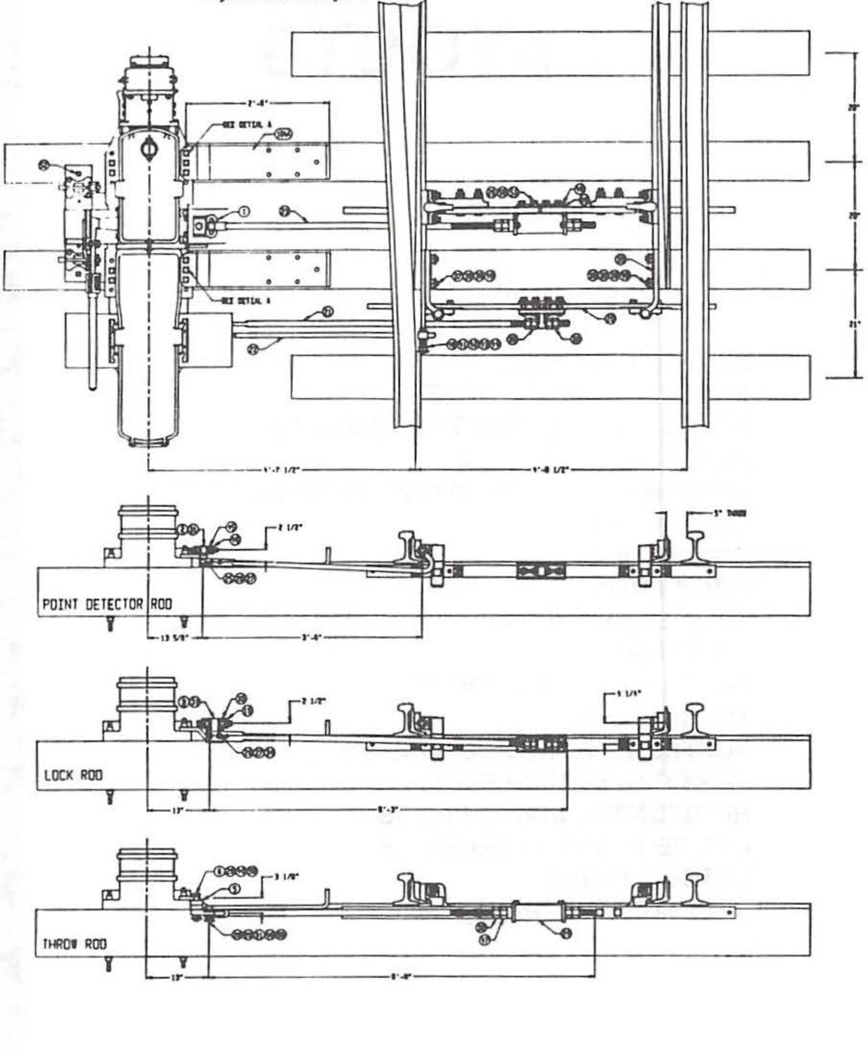
SWITCH

LAYOUTS

SWITCH LAYOUTS
FRONT ROD ASSEMBLIES
ADJUSTMENT BASKET ASSEMBLIES
POINT DETECTOR RODS
SWITCH CIRCUIT CONTROLLER RODS
THROW RODS
POINT LUGS
DROP LUGS
PIPE LINE FITTINGS
TIE STRAPS
COUPLERS, THROW ROD
TIE BOLT KITS
POINT LUG BOLT ASSEMBLIES
VERTICAL SWITCH RODS
HORIZONTAL SWITCH RODS
GAUGE PLATE ASSEMBLIES
LATCH STANDS
REPLACEMENT PARTS

SWITCH LAYOUTS

Switch Layouts can be provided to fit your required specifications, as packaged units or individual **forged** components. We can design a Switch Layout from customer specifications, our experienced staff will visit your sites and assist in the design of your Switch Layout.


2'-8"
SEE DETAIL A
SEE DETAIL A
20"
20"
21"
4'-7 1/2"
4'-8 1/2"
2 1/2"
5" THROW
POINT DETECTOR ROD
13 5/8"
3'-6"
2 1/2"
1 1/4"
LOCK ROD
13"
6'-7"
3 1/8"
THROW ROD
13"
6'-8"

FRONT ROD ASSEMBLIES

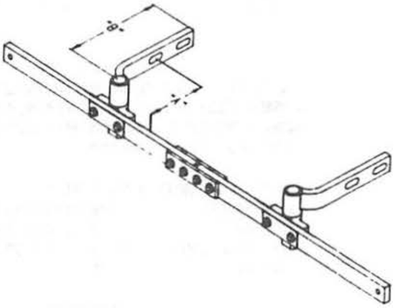
SWIVEL TYPE:

FRONT ROD WITH 4 1/4" DROP ON CENTER. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=13 1/8" B=6 1/2" TO 8".
PART NO. HL996977-001

FRONT ROD WITH 5 5/16" DROP ON CENTER. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=13 1/8" B=6 1/2" TO 8".
PART NO. HL996977-003

FRONT ROD WITH 4 1/4" DROP ON CENTER. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=15 1/8" B=8 1/2" TO 10".
PART NO. HL996977-005

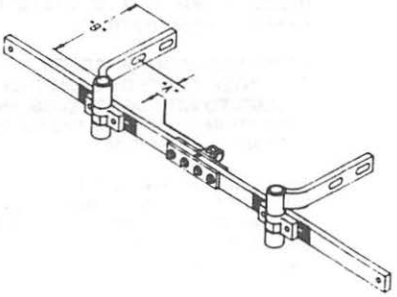
FRONT ROD WITH 5 5/16" DROP ON CENTER. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=15 1/8" B=8 1/2" TO 10".
PART NO. HL996977-007



FRONT ROD WITH 4 1/4" DROP ON CENTER LUG. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=13 1/8" B=1/2" TO 2".
PART NO. HL996970-001

FRONT ROD WITH 5 5/16" DROP ON CENTER LUG. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=13 1/8" B=1/2" TO 2"
PART NO. HL996970-003

FRONT ROD WITH 4 1/4" DROP ON CENTER LUG. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=15 1/8" B=2 1/2" TO 4".
PART NO. HL996970-005



FRONT ROD WITH 5 5/16" DROP ON CENTER LUG. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=15 1/8" B=2 1/2" TO 4".
PART NO. HL996970-007

FRONT ROD ASSEMBLIES

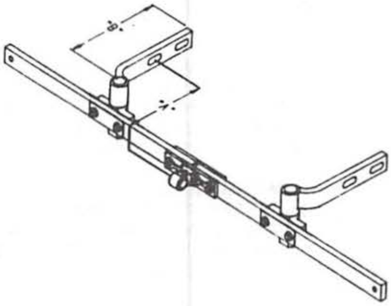
SWIVEL TYPE:

FRONT ROD WITH 4 1/4" DROP ON CENTER LUG. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=13 1/8" B=7 1/2" TO 9".
PART NO. HL996978-001

FRONT ROD WITH 5 5/16" DROP ON CENTER LUG. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=13 1/8" B=7 1/2" TO 9".
PART NO. HL996978-003

FRONT ROD WITH 4 1/4" DROP ON CENTER LUG. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=15 1/8" B=9 1/2" TO 11".
PART NO. HL996978-005

FRONT ROD WITH 5 5/16" DROP ON CENTER LUG. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=15 1/8" B=9 1/2" TO 11".
PART NO. HL996978-007

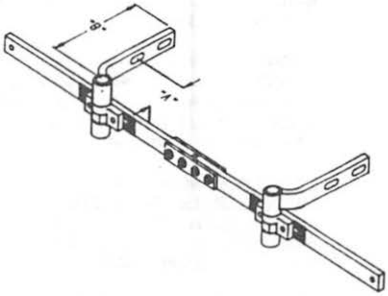


FRONT ROD WITH 4 1/4" DROP ON CENTER. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=13 1/8" B=3 1/2" TO 5".
PART NO. HL996976-001

FRONT ROD WITH 5 5/16" DROP ON CENTER. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=13 1/8" B=3 1/2" TO 5"
PART NO. HL996976-003

FRONT ROD WITH 4 1/4" DROP ON CENTER. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=15 1/8" B=5 1/2" TO 7".
PART NO. HL996976-005

FRONT ROD WITH 5 5/16" DROP ON CENTER. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=15 1/8" B=5 1/2" TO 7".
PART NO. HL996976-007



L & W INDUSTRIES

FRONT ROD ASSEMBLIES

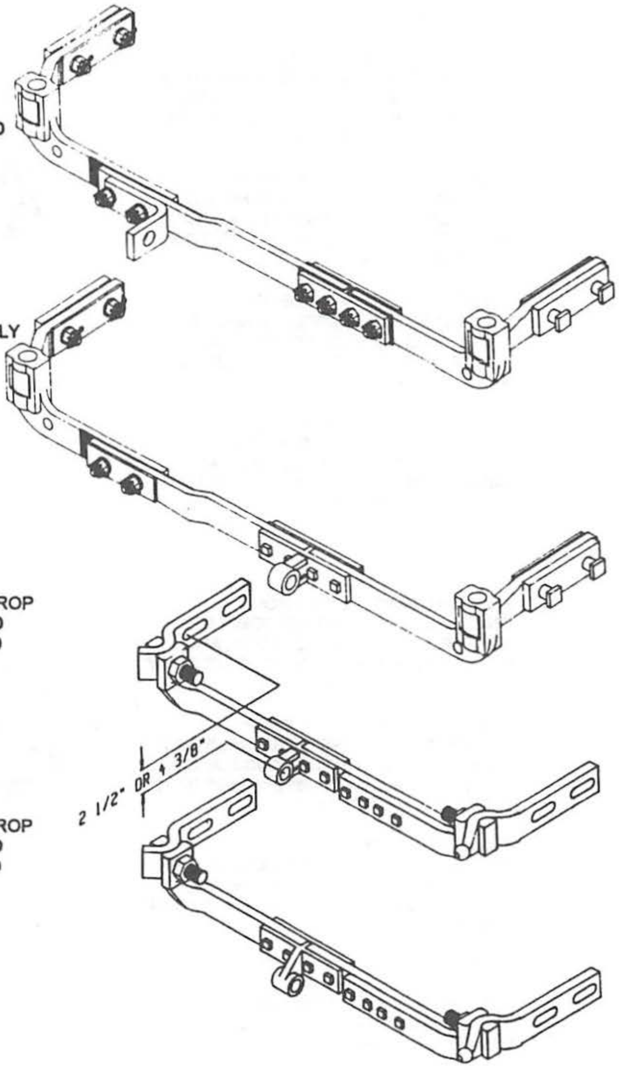
SWIVEL TYPE:

FRONT ROD-MF STYLE WITH OFFSET CENTER LUG ANGLE. SHIPPED COMPLETELY ASSEMBLED WITH INSULATION KIT.
PART NO. HL996223-000

FRONT ROD-MF STYLE WITH FORGED CENTER LUG. SHIPPED COMPLETELY ASSEMBLED WITH INSULATION KIT.
PART NO. HL996224-000

FRONT ROD WITH 2 1/2" DROP ON CENTER LUG. SHIPPED COMPLETELY ASSEMBLED WITH T'BOLTS, AND INSULATION KIT.
PART NO. HL996809-100

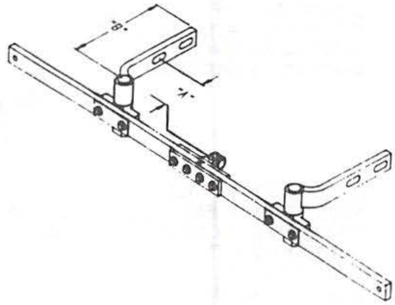
FRONT ROD WITH 4 3/8" DROP ON CENTER LUG. SHIPPED COMPLETELY ASSEMBLED WITH T'BOLTS, AND INSULATION KIT.
PART NO. HL996809-000



FRONT ROD ASSEMBLIES

SWIVEL TYPE:

FRONT ROD WITH 4 1/4" DROP ON CENTER LUG. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=13 1/8" B=3 1/2" TO 5".
PART NO. HL996971-001

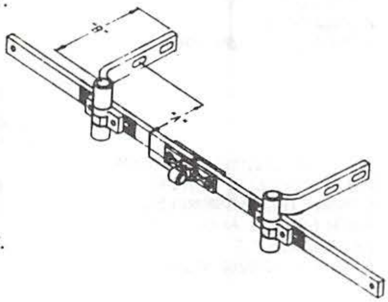


FRONT ROD WITH 5 5/16" DROP ON CENTER LUG. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=13 1/8" B=3 1/2" TO 5".
PART NO. HL996971-003

FRONT ROD WITH 4 1/4" DROP ON CENTER LUG. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=15 1/8" B=5 1/2" TO 7".
PART NO. HL996971-005

FRONT ROD WITH 5 5/16" DROP ON CENTER LUG. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=15 1/8" B=5 1/2" TO 7".
PART NO. HL996971-007

FRONT ROD WITH 4 1/4" DROP ON CENTER LUG. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=13 1/8" B=10 1/2" TO 12".
PART NO. HL996979-001



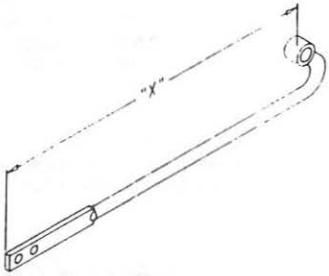
FRONT ROD WITH 5 5/16" DROP ON CENTER LUG. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=13 1/8" B=10 1/2" TO 12"
PART NO. HL996979-003

FRONT ROD WITH 4 1/4" DROP ON CENTER LUG. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=15 1/8" B=12 1/2" TO 14".
PART NO. HL996979-005

FRONT ROD WITH 5 5/16" DROP ON CENTER LUG. SHIPPED COMPLETELY ASSEMBLED WITH SWIVEL LUGS, AND INSULATION KIT. A=15 1/8" B=12 1/2" TO 14".
PART NO. HL996979-007

POINT DETECTOR RODS

POINT DETECTOR RODS (NEAR RAIL):



POINT DETECTOR ROD 1" DIAMETER FOR NEAR RAIL CONNECTION. DIM X=3'.
PART NO. HL996013-000

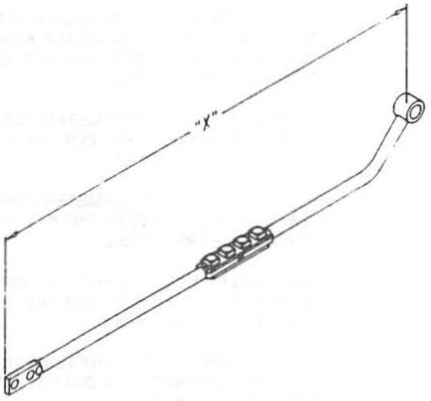
POINT DETECTOR ROD 1" DIAMETER FOR NEAR RAIL CONNECTION. DIM X=3' 8".
PART NO. HL996013-001

POINT DETECTOR ROD 1" DIAMETER FOR NEAR RAIL CONNECTION. DIM X=3' 11".
PART NO. HL996013-002

POINT DETECTOR ROD 1" DIAMETER FOR NEAR RAIL CONNECTION. DIM X=6' 1".
PART NO. HL996013-003

POINT DETECTOR ROD 1" DIAMETER FOR NEAR RAIL CONNECTION. DIM X=6' 7".
PART NO. HL996013-004

POINT DETECTOR RODS (FAR RAIL):



POINT DETECTOR ROD 1" DIAMETER FOR FAR RAIL CONNECTION. DIM X=6' 4".
PART NO. HL996159-000

POINT DETECTOR ROD 1" DIAMETER FOR FAR RAIL CONNECTION. DIM X=6' 8 1/2".
PART NO. HL996159-001

POINT DETECTOR ROD 1" DIAMETER FOR FAR RAIL CONNECTION. DIM X=7' 0".
PART NO. HL996159-002

POINT DETECTOR ROD 1" DIAMETER FOR FAR RAIL CONNECTION. DIM X=7' 2 1/2".
PART NO. HL996159-003

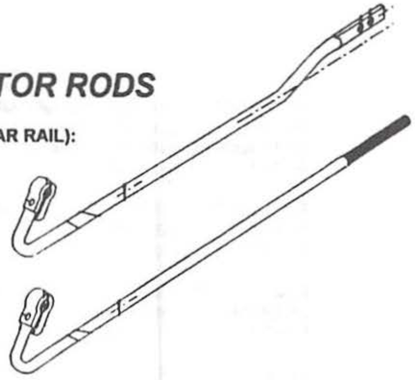
POINT DETECTOR ROD 1" DIAMETER FOR FAR RAIL CONNECTION. DIM X=7' 2 1/2".
PART NO. HL996159-004

POINT DETECTOR ROD 1" DIAMETER FOR FAR RAIL CONNECTION. DIM X=7' 8 1/2".
PART NO. HL996159-005

POINT DETECTOR ROD 1" DIAMETER FOR FAR RAIL CONNECTION. DIM X=7' 10".
PART NO. HL996159-006

POINT DETECTOR ROD 1" DIAMETER FOR FAR RAIL CONNECTION. DIM X=8' 9".
PART NO. HL996159-007

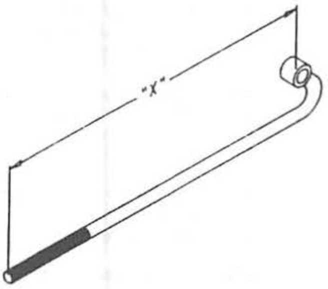
POINT DETECTOR RODS



POINT DETECTOR ROD WITH SWIVEL END (NEAR RAIL):
POINT DETECTOR ROD 1 1/2" DIAMETER
FOR NEAR RAIL CONNECTION. 47" LONG.
PART NO. HL996138-000

POINT DETECTOR ROD 1" DIAMETER FOR
NEAR RAIL CONNECTION. 49" LONG.
PART NO. HL996894-000

SWITCH CIRCUIT CONTROLLER RODS



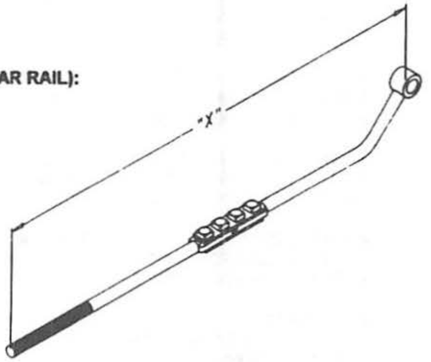
SWITCH CIRCUIT CONTROLLER RODS (NEAR RAIL):
CONTROLLER ROD 1" DIAMETER FOR
NEAR RAIL CONNECTION. DIM X=2' 10".
PART NO. HL996125-000

CONTROLLER ROD 1" DIAMETER FOR
NEAR RAIL CONNECTION. DIM X=3' 4".
PART NO. HL996125-001

CONTROLLER ROD 1" DIAMETER FOR
NEAR RAIL CONNECTION. DIM X=3' 6".
PART NO. HL996125-002

CONTROLLER ROD 1" DIAMETER FOR
NEAR RAIL CONNECTION. DIM X=3' 10".
PART NO. HL996125-003

CONTROLLER ROD 1" DIAMETER FOR
NEAR RAIL CONNECTION. DIM X=4' 10".
PART NO. HL996125-004



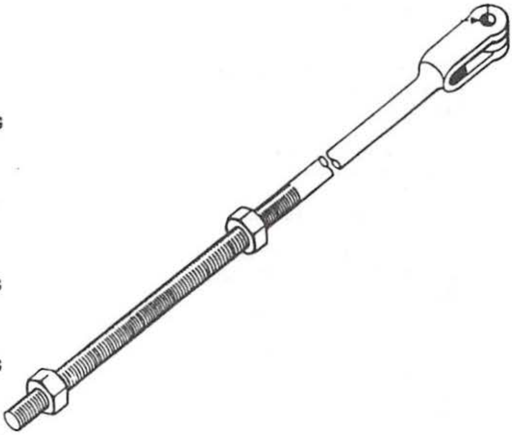
SWITCH CIRCUIT CONTROLLER RODS (FAR RAIL):
CONTROLLER ROD 1" DIAMETER FOR
FAR RAIL CONNECTION. DIM X=7' 6".
PART NO. HL996158-000

CONTROLLER ROD 1" DIAMETER FOR
FAR RAIL CONNECTION. DIM X=7' 2".
PART NO. HL996158-001

CONTROLLER ROD 1" DIAMETER FOR
FAR RAIL CONNECTION. DIM X=9' 6".
PART NO. HL996158-002

THROW RODS

THROW RODS (STRAIGHT):



THROW ROD 1 1/4" X 42"
INCLUDING PIN ASSEMBLY
PART NO. HL996152-000

THROW ROD 1 1/4" X 65" LONG
INCLUDING PIN ASSEMBLY
PART NO. HL996156-000

THROE ROD 1 1/4" X 68" LONG
INCLUDING PIN ASSEMBLY
PART NO. HL996156-006

THROW ROD 1 1/4" X 70" LONG
INCLUDING PIN ASSEMBLY
PART NO. HL996156-007

THROW ROD 1 1/4" X 72" LONG
INCLUDING PIN ASSEMBLY
PART NO. HL996152-001

THROW ROD 1 1/4" X 74" LONG
INCLUDING PIN ASSEMBLY
PART NO. HL996156-004

THROW ROD 1 1/4" X 78" LONG
INCLUDING PIN ASSEMBLY
PART NO. HL996156-003

THROW ROD 1 1/4" X 81" LONG
INCLUDING PIN ASSEMBLY
PART NO. HL996156-002

THROW ROD 1 1/4" X 84" LONG
INCLUDING PIN ASSEMBLY
PART NO. HL996156-005

THROW ROD 1 1/4" X 108"
INCLUDING PIN ASSEMBLY
PART NO. HL996152-002

THROW ROD 1 1/4" X 144"
INCLUDING PIN ASSEMBLY
PART NO. HL996152-004

Throw rods are shipped with a 7/8" x 2 1/2" pin assembly with nut washer and cotter pin. Also included are the 1 1/4" nut kit.

THROW RODS

THROW RODS (OFFSET):

THROW ROD 1 1/4" X 71" LONG
WITH 1" OFFSET. INCLUDING
PIN ASSEMBLY
PART NO. HL996145-005

THROW ROD 1 1/4" X 72" LONG
WITH 2 1/8" OFFSET. INCLUDING
PIN ASSEMBLY
PART NO. HL996145-002

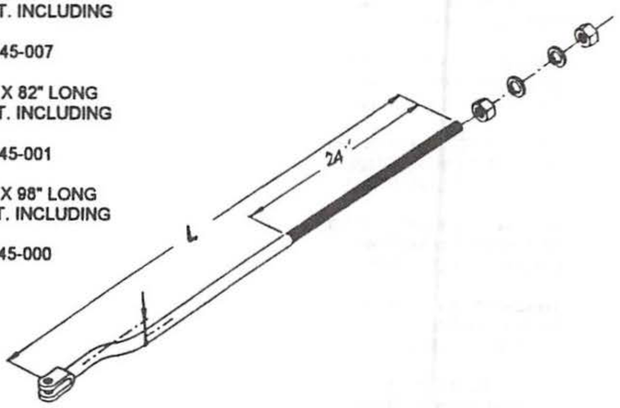
THROW ROD 1 1/4" X 72" LONG
WITH 2 3/4" OFFSET. INCLUDING
PIN ASSEMBLY
PART NO. HL996145-004

THROW ROD 1 1/4" X 72" LONG
WITH 3 1/2" OFFSET. INCLUDING
PIN ASSEMBLY
PART NO. HL996145-006

THROW ROD 1 1/4" X 74" LONG
WITH 1 7/8" OFFSET. INCLUDING
PIN ASSEMBLY.
PART NO. HL996145-007

THROW ROD 1 1/4" X 82" LONG
WITH 1 7/8" OFFSET. INCLUDING
PIN ASSEMBLY.
PART NO. HL996145-001

THROW ROD 1 1/4" X 98" LONG
WITH 1 7/8" OFFSET. INCLUDING
PIN ASSEMBLY.
PART NO. HL996145-000



LOCK RODS

LOCK RODS (STRAIGHT):
LOCK ROD 1 1/4" X 60" LONG
PART NO. HL996148-000

LOCK ROD 1 1/4" X 64 1/2" LONG
PART NO. HL996800-000

LOCK ROD 1 1/4" X 68" LONG
PART NO. HL996148-005

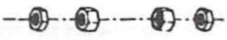
LOCK ROD 1 1/4" X 70" LONG
PART NO. HL996148-001

LOCK ROD 1 1/4" X 72" LONG
PART NO. HL996148-002

LOCK ROD 1 1/4" X 74" LONG
PART NO. HL996148-104

LOCK ROD 1 1/4" X 76" LONG
PART NO. HL996148-003

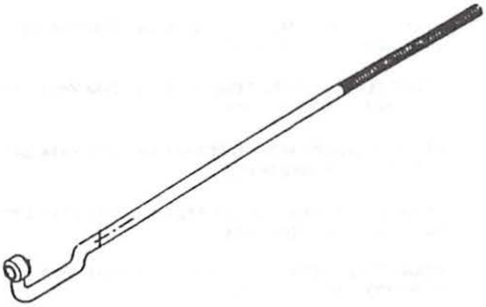
LOCK ROD 1 1/4" X 96" LONG
PART NO. HL996148-004

Lock rods are shipped with 1 1/4" nut kits. 

LOCK RODS (OFFSET):
LOCK ROD 1 1/4" X 58 1/4" LONG
WITH 3" OFFSET
PART NO. HL996801-000

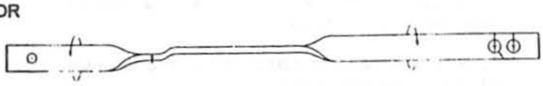
LOCK ROD 1 1/4" X 65 1/2" LONG
WITH 4" OFFSET
PART NO. HL996801-001

LOCK ROD 1 1/4" X 61" LONG
WITH 4" OFFSET
PART NO. HL996801-002



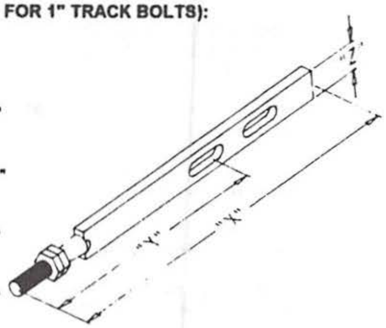
LOCK RODS, CONNECTING:

LOCK ROD, CONNECTING FOR
FRONT SWIVEL ROD.
PART NO. HL061178-000



POINT LUGS

POINT LUGS WITH TAPERED SHANKS (2 1/2" WIDE FOR 1" TRACK BOLTS):



POINT LUG ASSEMBLY DIM X=15 3/4" DIM Y=8 7/8"
PART NO. HL996179-000

POINT LUG ASSEMBLY DIM X=18 1/2" DIM Y=11 5/8"
PART NO. HL996179-001

POINT LUG ASSEMBLY DIM X=21 1/4" DIM Y= 14 5/8"
PART NO. HL996179-002

POINT LUG ASSEMBLY DIM X=24 1/4" DIM Y=17 5/8"
PART NO. HL996179-003

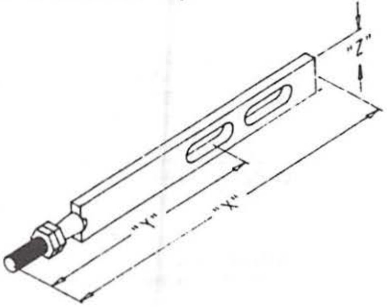
POINT LUG ASSEMBLY DIM X=17 1/8" DIM Y=10 1/4"
PART NO. HL996179-004

POINT LUG ASSEMBLY DIM X=19 7/8" DIM Y= 13"
PART NO. HL996179-005

POINT LUG ASSEMBLY DIM X=22 3/4" DIM Y=15 7/8"
PART NO. HL996179-006

POINT LUG ASSEMBLY DIM X=21 1/2" DIM Y=13 5/8"
PART NO. HL996179-007

POINT LUGS WITH TAPERED SHANKS (2" WIDE FOR 3/4" TRACK BOLTS):



POINT LUG ASSEMBLY DIM X=15 3/4" DIM Y=8 7/8"
PART NO. HL996014-000

POINT LUG ASSEMBLY DIM X=18 1/2" DIM Y=11 5/8"
PART NO. HL996014-001

POINT LUG ASSEMBLY DIM X=21 1/4" DIM Y=14 3/4"
PART NO. HL996014-002

POINT LUG ASSEMBLY DIM X=24 1/4" DIM Y=17 3/8"
PART NO. HL996014-003

POINT LUG ASSEMBLY DIM X=17 1/8" DIM Y=10 1/4"
PART NO. HL996014-004

POINT LUG ASSEMBLY DIM X=19 7/8" DIM Y=13"
PART NO. HL996014-005

POINT LUG ASSEMBLY DIM X=22 3/4" DIM Y=15 7/8"
PART NO. HL996014-006

POINT LUG ASSEMBLY DIM X=21 1/2" DIM Y=13 5/8"
PART NO. HL996014-007

Point lugs are shipped assembled with washer, spring nut kit, and cotter pin.

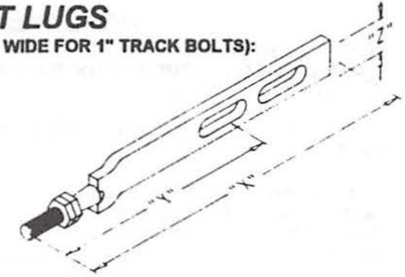
POINT LUGS

POINT LUGS WITH TAPERED SHANKS (2" WIDE FOR 1" TRACK BOLTS):
POINT LUG ASSEMBLY 17 7/8" LONG
PART NO. HL996169-000

POINT LUG ASSEMBLY 15 3/4" LONG
PART NO. HL996169-002

POINT LUG ASSEMBLY 16 7/8" LONG
PART NO. HL996169-003

POINT LUG ASSEMBLY 19 7/8" LONG
PART NO. HL996169-004



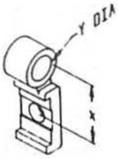
DROP LUGS

DROP LUGS (FOR DETECTOR RODS):
DROP LUG DIM X=2 1/2" DIM Y=25/32"
PART NO. HL031101-000

DROP LUG DIM X=4 1/2" DIM Y=25/32"
PART NO. HL031101-005

DROP LUG DIM X=4" DIM Y=25/32"
PART NO. HL031101-006

DROP LUG DIM X=2 1/2" DIM Y=25/32"
PART NO. HL031101-004



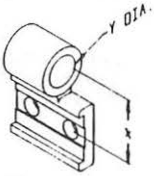
DROP LUGS (FOR LOCK RODS):
DROP LUG DIM X=3 1/2" DIM Y=1 1/32"
PART NO. HL031101-001

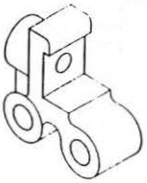
DROP LUG DIM X=5" DIM Y=1 1/32"
PART NO. HL031101-002

DROP LUG DIM X=2 1/2" DIM Y=1 1/32"
PART NO. HL031101-003

DROP LUG DIM X=4 1/4" DIM Y= 1 5/16"
PART NO. HL031101-007

DROP LUG FOR SPLIT LOCK ROD
PART NO. HLSF-03





Drop lug are shipped complete with proper 3/4" mounting bolt kits.

POINT ROLLERS

POINT ROLLERS:

POINT ROLLER SET
PART NO. HLJMF-PR1

Sold 2 each per set

PIPE LINE FITTINGS

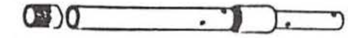
HELPER ASSEMBLIES:

HELPER ASSEMBLY COMPLETE FOR R.H. OR L.H., 30' TURNOUT.
PART NO. HLSPHA30R (L)

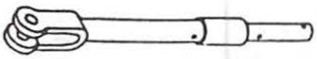
HELPER ASSEMBLY COMPLETE FOR R.H. OR L.H., 39' TURNOUT.
PART NO. HLSPHA39R (L)

PIPE LINE FITTINGS (HELPER ROD):

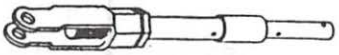
HELPER ROD PIPE 1" X 20', STEEL GALVANIZED. WITH RIVETS AND PIPE COUPLING.
PART NO. HL996019-000



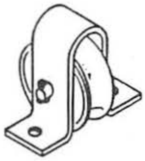
SOLID JAW ROD 1 1/4" TANGED END. FOR 1" PIPE. COMPLETE WITH RIVETS AND PIPE COUPLING.
PART NO. HL996091-000



SCREW JAW ROD TANGED END. FOR 1" PIPE. COMPLETE WITH SCREW JAW, JAM NUT, RIVETS, AND PIPE COUPLING.
PART NO. HL996008-000



PIPE STRAP CARRIER ONE WAY FOR 1" PIPE.
PART NO. HL4000-X



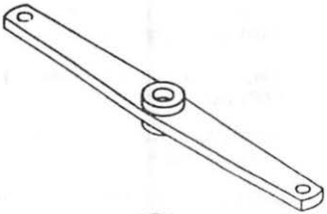
CRANK STANDS:

CRANK STAND WITH PIN
PART NO. HL996966-000

COMPENSATOR ARMS:

COMPENSATOR STRAIGHT ARM
DIM X=11 3/4" DIM Y=11 3/4".
PART NO. HL996951-000

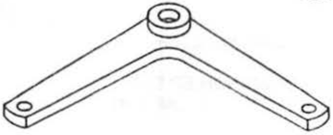
COMPENSATOR STRAIGHT ARM
DIM X=9" DIM Y=9".
PART NO. HL996950-000



CRANKS:

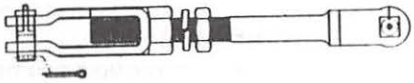
CRANK, RIGHT ANGLE 11 3/4" X 11 3/4"
PART NO. HL996962-000

CRANK, RIGHT ANGLE 9" X 9"
PART NO. HL996963-000



PIPE LINE FITTINGS (CONT.)

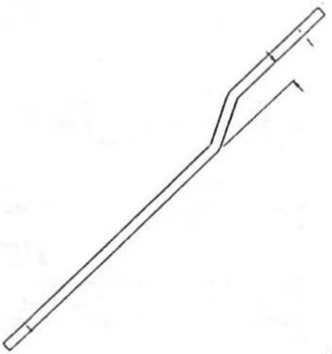
ADJUSTABLE LINK:
ADJUSTABLE LINK, 16" TO 20" WITH SCREW JAW, CONNECTING PIN AND HARDWARE.
PART NO. HL996874-000



TIE STRAPS

TIE STRAPS (DROP TYPE):
TIE STRAP, 7" DROP 20" CENTERLINE OF HOLES.
PART NO. HL061222-000

TIE STRAP, 7" DROP 19 1/2", 17", AND 5" CENTERLINE OF HOLES
PART NO. HL061223-000



TIE STRAPS (OFFSET):
TIE STRAP, 3/4" OFFSET. 20" CENTERLINE OF HOLES.
PART NO. HL061189-001

TIE STRAP, 1 1/4" OFFSET. 20" CENTERLINE OF HOLES.
PART NO. HL091189-000

TIE STRAP, 2 1/2" OFFSET. 19 1/2" AND 17 1/2" CENTERLINE OF HOLES.
PART NO. HL061194-000

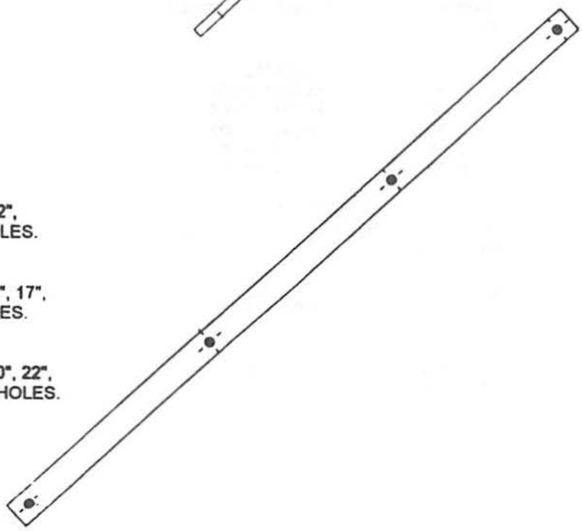
TIE STRAPS (STRAIGHT):
TIE STRAP, STRAIGHT 22" CENTERLINE OF HOLES.
PART NO. HL061192-001

TIE STRAP, STRAIGHT 20" CENTERLINE OF HOLES.
PART NO. HL061192-000

TIE STRAP, STRAIGHT 22", 22", AND 20" CENTERLINE OF HOLES.
PART NO. HL061180-000

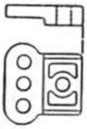
TIE STRAP, STRAIGHT 19 1/2", 17", AND 5" CENTERLINE OF HOLES.
PART NO. HL061224-000

TIE STRAP, STRAIGHT 20", 20", 22", 21", 20 1/2" CENTERLINE OF HOLES.
PART NO. HL061225-000

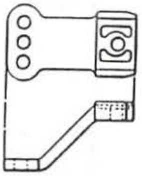


COUPLERS

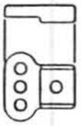
COUPLERS FOR THROW ROD CONNECTION:
COUPLER STRAIGHT FOR MOUNTING THROW ROD TO GRS SWITCH MACHINE. MODEL 5A,5B,5D,5E,5F,5G, AND 5H.
PART NO. HL001112-001



COUPLER OFFSET 3 1/2" FOR MOUNTING THROW ROD TO GRS SWITCH MACHINE. MODEL 5A,5B,5D,5E,5F,5G, AND 5H.
PART NO. HL001194-001



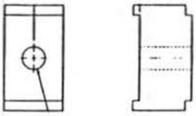
COUPLER STRAIGHT FOR MOUNTING THROW ROD TO GRS SWITCH MACHINE, MODEL 6.
PART NO. HL001211-001



COUPLER STRAIGHT FOR MOUNTING THROW ROD TO U.S. & S. SWITCH MACHINE. MODEL M3. M22, AND M23.
PART NO. HL001143-001

COUPLER SHIMS:
1" COUPLER SHIM FOR GRS SWITCH MACHINE. MODEL 5A,5B,5D,5E,5F,5G,AND 5H.
PART NO. HL071849-001

1" COUPLER SHIM FOR U.S. & S, SWITCH MACHINE. MODEL M3, M22, AND M23.
PART NO. HL071848-001



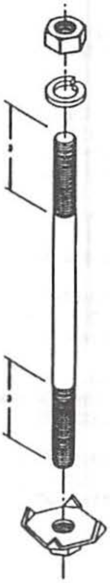
TIE BOLT KITS

TIE BOLT KITS WITH GRIP NUTS:
TIE BOLT KIT COMPLETE WITH ALL HARDWARE. 3/4" DIA. WITH 3" THREAD EACH END.

LENGTH	PART NO.
11" LONG	HL031133-000
12" LONG	HL031133-004
13" LONG	HL031133-003
16" LONG	HL031133-001
17" LONG	HL031133-002

TIE BOLT KIT COMPLETE WITH ALL HARDWARE 7/8" DIA. WITH 3" THREAD EACH END.

LENGTH	PART NO.
11" LONG	HL031024-000
12" LONG	HL031024-004
13" LONG	HL031024-003
16" LONG	HL031024-001
17" LONG	HL031024-002



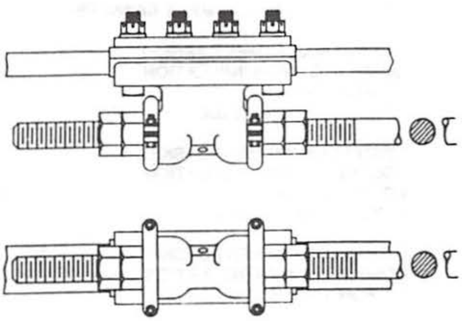
ADJUSTMENT BASKET ASSEMBLIES

VERTICAL ADJUSTMENT BASKETS:

SWITCH ADJUSTMENT BASKET COMPLETE. WITH INSULATION KIT FOR 3/4" BAR.
PART NO. HL996122-000

SWITCH ADJUSTMENT BASKET COMPLETE. WITH INSULATION KIT FOR 1" BAR.
PART NO. HL996122-001

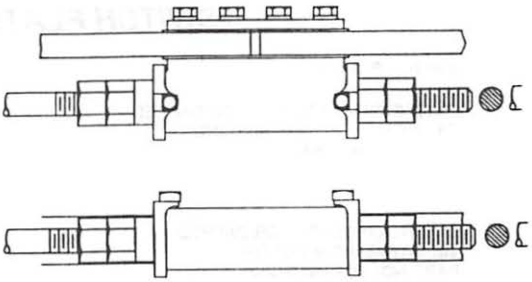
SWITCH ADJUSTMENT BASKET COMPLETE. WITH INSULATION KIT FOR 1 1/4" BAR.
PART NO. HL996122-002



SWITCH ADJUSTMENT BASKET COMPLETE. WITH INSULATION KIT FOR 3/4" BAR.
PART NO. HL996989-000

SWITCH ADJUSTMENT BASKET COMPLETE. WITH INSULATION KIT FOR 1" BAR.
PART NO. HL996989-001

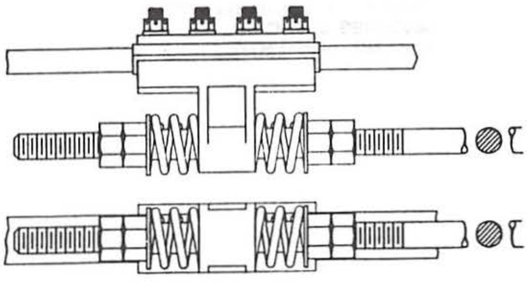
SWITCH ADJUSTMENT BASKET COMPLETE. WITH INSULATION KIT FOR 1 1/4" BAR.
PART NO. HL996989-002



SWITCH ADJUSTMENT BASKET COMPLETE. WITH EXTERNAL COMPRESSION SPRINGS AND INSULATION KIT FOR 3/4" BAR.
PART NO. HL996221-000

SWITCH ADJUSTMENT BASKET COMPLETE. WITH EXTERNAL COMPRESSION SPRINGS AND INSULATION KIT FOR 1" BAR.
PART NO. HL996221-001

SWITCH ADJUSTMENT BASKET COMPLETE. WITH EXTERNAL COMPRESSION SPRINGS AND INSULATION KIT FOR 1 1/4" BAR.
PART NO. HL996221-002



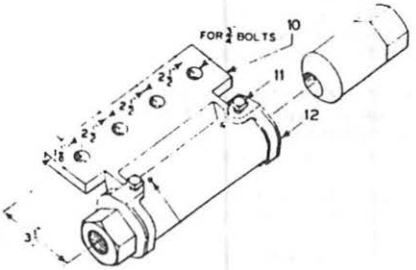
ADJUSTMENT BASKET ASSEMBLIES (CONT.)

HORIZONTAL ADJUSTMENT BASKETS:

SWITCH ADJUSTMENT BASKET
COMPLETE. WITH INSULATION
KIT FOR 3/4" BAR.
PART NO. HL996123-000

SWITCH ADJUSTMENT BASKET
COMPLETE. WITH INSULATION
KIT FOR 1" BAR.
PART NO. HL996123-001

SWITCH ADJUSTMENT BASKET
COMPLETE. WITH INSULATION
KIT FOR 1 1/4" BAR.



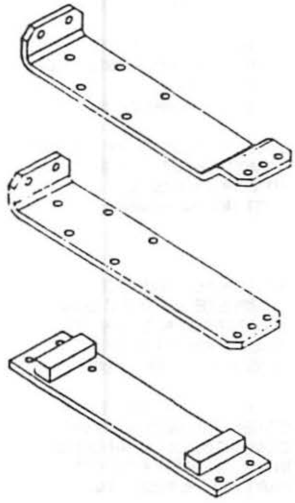
SWITCH PLATES

SWITCH PLATES:

EXTENSION PLATE FOR NON DAPPED
TIE WITH 2" OFFSET, 30" LONG.
PART NO. HL996803

EXTENSION PLATE FOR DAPPED
TIE, STRAIGHT NO OFFSET.
PART NO. HL996802-000

SADDLE PLATE FOR GRS SWITCH
MACHINES, 8" X 24".
PART NO. HL051124-000

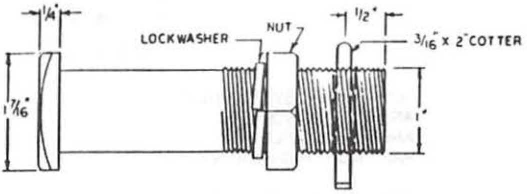


POINT LUG BOLT KITS

1" POINT LUG BOLT KITS:

POINT LUG BOLT KIT

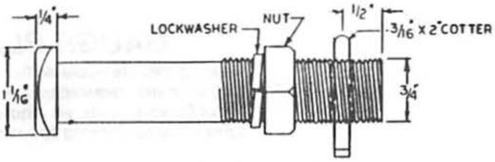
1" - 8 X 4"	PART NO.	HL8820-X
1" - 8 X 4 1/2"	PART NO.	HL8820-1X
1" - 8 X 5"	PART NO.	HL8821-X
1" - 8 X 5 1/2"	PART NO.	HL8821-1X
1" - 8 X 6"	PART NO.	HL8822-X
1" - 8 X 6 1/2"	PART NO.	HL8822-1X


1/4"
1/2"
LOCKWASHER
NUT
3/16" x 2" COTTER
1 7/16"
1"

3/4" POINT LUG BOLT KITS:

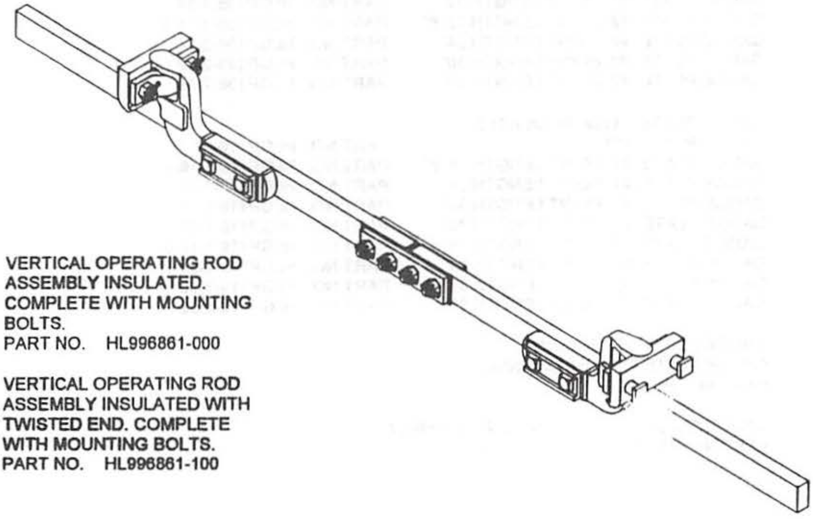
POINT LUG BOLT KIT

3/4" - 10 X 4"	PART NO.	HL8810-X
3/4" - 10 X 5"	PART NO.	HL8811-X
3/4" - 10 X 5 1/2"	PART NO.	HL8811-1X
3/4" - 10 X 6"	PART NO.	HL8812-X
3/4" - 10 X 6 1/2"	PART NO.	HL8812-1X


1/4"
1/2"
LOCKWASHER
NUT
3/16" x 2" COTTER
1 1/16"
3/4"

VERTICAL OPERATING RODS

VERTICAL OPERATING RODS:

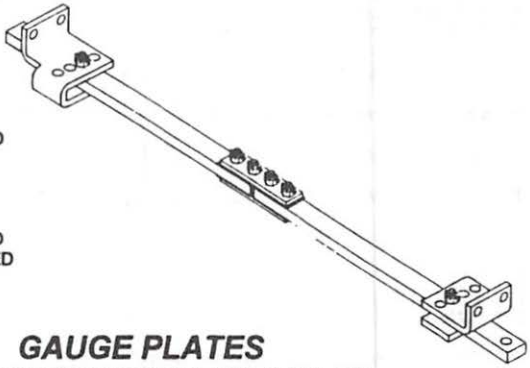


VERTICAL OPERATING ROD ASSEMBLY INSULATED. COMPLETE WITH MOUNTING BOLTS.
PART NO. HL996861-000

VERTICAL OPERATING ROD ASSEMBLY INSULATED WITH TWISTED END. COMPLETE WITH MOUNTING BOLTS.
PART NO. HL996861-100

HORIZONTAL SWITCH RODS

HORIZONTAL SWITCH RODS:



HORIZONTAL SWITCH ROD
ASSEMBLY INSULATED
AND ADJUSTABLE.
PART NO. HL996230-000

HORIZONTAL SWITCH ROD
ASSEMBLY NON-INSULATED
AND ADJUSTABLE.
PART NO. HL996230-100

GAUGE PLATES

Gauge plates are available from L & W Industries. With the information required to determine the proper gauge plates for your needs, we request that you contact our sales office for ordering specifications

GAUGE PLATES 136#, INSULATED:

GAUGE PLATE, #01,	PART NO. HLGP136-01
GAUGE PLATE, #1, POINT LENGTH 16' 6"	PART NO. HLGP136-1-16-6
GAUGE PLATE, #1, POINT LENGTH 24'	PART NO. HLGP136-1-24
GAUGE PLATE, #1, POINT LENGTH 30'	PART NO. HLGP136-1-30
GAUGE PLATE, #1, POINT LENGTH 39'	PART NO. HLGP136-1-39
GAUGE PLATE, #2, POINT LENGTH 16' 6"	PART NO. HLGP136-2-16-6
GAUGE PLATE, #2, POINT LENGTH 24'	PART NO. HLGP136-2-24
GAUGE PLATE, #2, POINT LENGTH 30'	PART NO. HLGP136-2-30
GAUGE PLATE, #2, POINT LENGTH 39'	PART NO. HLGP136-2-39

GAUGE PLATES 119#, INSULATED:

GAUGE PLATE, #01	PART NO. HLGP119-01
GAUGE PLATE, #1, POINT LENGTH 16' 6"	PART NO. HLGP119-1-16-6
GAUGE PLATE, #1, POINT LENGTH 24'	PART NO. HLGP119-1-24
GAUGE PLATE, #1, POINT LENGTH 30'	PART NO. HLGP119-1-30
GAUGE PLATE, #1, POINT LENGTH 39'	PART NO. HLGP119-1-39
GAUGE PLATE, #2, POINT LENGTH 16' 6"	PART NO. HLGP119-1-16-6
GAUGE PLATE, #2, POINT LENGTH 24'	PART NO. HLGP119-1-24
GAUGE PLATE, #2, POINT LENGTH 30'	PART NO. HLGP119-1-30
GAUGE PLATE, #2, POINT LENGTH 39'	PART NO. HLGP119-1-39

GAUGE PLATE EXTENSIONS:

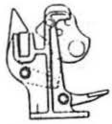
GAUGE PLATE POWER EXTENSION
PART NO. HLGPE-1

GAUGE PLATE BOLT EXTENSION ASSEMBLY
PART NO. HLGP-30A

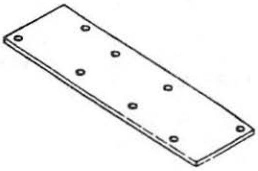
LATCH STANDS

LATCH STANDS:

LATCH STAND FOR GRS SWITCH
MACHINES.
PART NO. HL



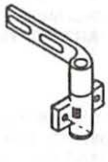
LATCH STAND PLATE, FOR GRS
SWITCH MACHINES.
PART NO. HL



REPLACEMENT PARTS

SWITCH LAYOUTS

SWIVEL LUGS:

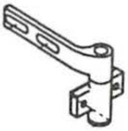


RIGHT HAND SWIVEL LUG ASSEMBLY
13 1/8" LONG. WITH 4 1/4" DROP.
PART NO. HL991102-011

RIGHT HAND SWIVEL LUG ASSEMBLY
13 1/8" LONG. WITH 5 3/16" DROP.
PART NO. HL991102-021

RIGHT HAND SWIVEL LUG ASSEMBLY
15 1/8" LONG. WITH 4 1/4" DROP.
PART NO. HL991102-121

RIGHT HAND SWIVEL LUG ASSEMBLY
15 1/8" LONG. WITH 5 3/16" DROP.
PART NO. HL991102-111

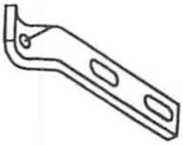


LEFT HAND SWIVEL LUG ASSEMBLY
13 1/8" LONG. WITH 4 1/4" DROP.
PART NO. HL991192-011

LEFT HAND SWIVEL LUG ASSEMBLY
13 1/8" LONG. WITH 5 3/16" DROP.
PART NO. HL991192-021

LEFT HAND SWIVEL LUG ASSEMBLY
15 1/8" LONG. WITH 4 1/4" DROP.
PART NO. HL991192-121

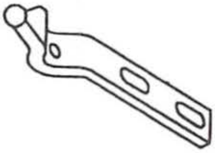
LEFT HAND SWIVEL LUG ASSEMBLY
15 1/8" LONG. WITH 5 3/16" DROP.
PART NO. HL991192-111



SWIVEL LUG, WITHOUT BALL END DIM Y=3 1/2"
PART NO. HL001152-000

SWIVEL LUG, WITHOUT BALL END DIM Y=4 1/2"
PART NO. HL001152-001

SWIVEL LUG, WITHOUT BALL END DIM Y=6 1/2"
PART NO. HL001152-002



SWIVEL LUG, WITH BALL END DIM Y=3 1/2"
PART NO. HL001154-001

SWIVEL LUG, WITH BALL END DIM Y=4 1/2"
PART NO. HL001154-002

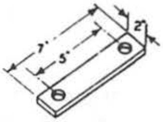
SWIVEL LUG, WITH BALL END DIM Y= 6 1/2"
PART NO. HL001154-003

L & W INDUSTRIES

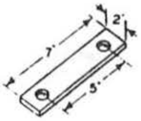
REPLACEMENT PARTS
SWITCH LAYOUTS

WASHER PLATES:

WASHER PLATE 1/8" THICK STEEL 5" BOLT CENTERS FOR 3/4" BOLTS. FOR MOUNTING SWIVEL LUG TO TRANSIT BAR.
PART NO. HL061144-000



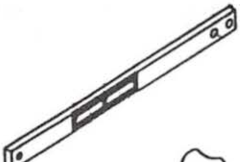
WASHER PLATE 1/4" THICK STEEL 5" BOLT CENTERS FOR 3/4" BOLTS. FOR MOUNTING FRONT ROD OR POINT LUGS.
PART NO. HL051148-000



WASHER PLATE 1/4" THICK STEEL 5" BOLT CENTERS FOR 1" BOLTS. FOR MOUNTING FRONT ROD OR POINT LUGS.
PART NO. HL051147-000

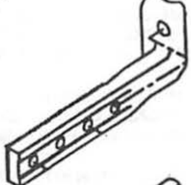
TRANSIT BARS:

TRANSIT BAR FOR SWIVEL FRONT ROD. 1" THICK X 36" LONG.
PART NO. HL071883-000



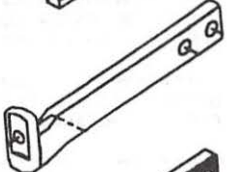
TRANSIT SWIVEL BAR LEFT HAND WITH 2 1/2" DROP.
PART NO. HL001156-101

TRANSIT SWIVEL BAR LEFT HAND WITH 4 3/8" DROP.
PART NO. HL001156-102

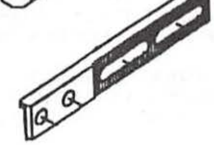


TRANSIT SWIVEL BAR RIGHT HAND WITH 2 1/2" DROP.
PART NO. HL001155-101

TRANSIT SWIVEL BAR RIGHT HAND WITH 4 3/8" DROP.
PART NO. HL001155-102



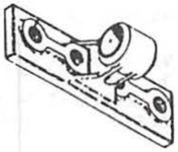
TRANSIT BAR, CONNECTING
PART NO. HL071768-000



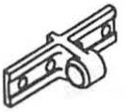
REPLACEMENT PARTS

SWITCH LAYOUTS

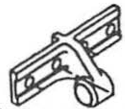
CENTER LUGS:



CENTER LUG, NO OFFSET.
PART NO. HL001176-001

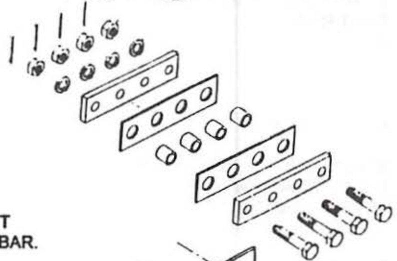


CENTER LUG, NO OFFSET
PART NO. HL001159-101

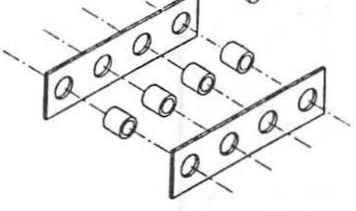


CENTER LUG, WITH OFFSET
PART NO. HL001159-102

INSULATION KITS:



INSULATION KIT FOR CONTROLLER ROD
PART NO. HL031188-000



INSULATION KIT, VERTICAL ADJUSTMENT
BASKET, OR CENTER LUG 3/4" TRANSIT BAR.
PART NO. HL031189-000

INSULATION KIT, VERTICAL ADJUSTMENT
BASKET, OR CENTER LUG 1" TRANSIT BAR.
PART NO. HL031189-001

INSULATION KIT, VERTICAL ADJUSTMENT
BASKET, OR CENTER LUG 1 1/4" TRANSIT BAR.
PART NO. HL031189-002

INSULATION KIT, VERTICAL ADJUSTMENT
BASKET. 3/4" X 2 1/2" TRANSIT BAR.
PART NO. HL031088-000

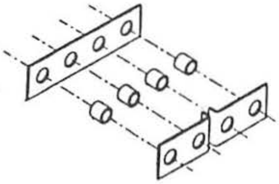
INSULATION KIT, VERTICAL ADJUSTMENT
BASKET. 1" X 2 1/2" TRANSIT BAR.
PART NO. HL031088-001

INSULATION KIT, VERTICAL ADJUSTMENT
BASKET. 1 1/4" X 2 1/2" TRANSIT BAR.
PART NO. HL031088-002

REPLACEMENT PARTS

SWITCH LAYOUTS

INSULATION KITS:



INSULATION KIT, HORIZONTAL ADJUSTMENT
BASKET. 3/4" TRANSIT BAR.
PART NO. HL031080-000

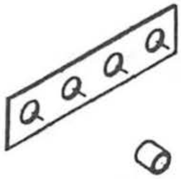
INSULATION KIT, HORIZONTAL ADJUSTMENT
BASKET. 1" TRANSIT BAR.
PART NO. HL031080-001

INSULATION KIT, HORIZONTAL ADJUSTMENT
BASKET. 1 1/4" TRANSIT BAR.
PART NO. HL031080-002

INSULATION KIT, 3/4" TRANSIT BAR OR
GAUGE ROD.
PART NO. HL031098-002

INSULATION KIT, 1" TRANSIT BAR OR
GAUGE ROD.
PART NO. HL031098-001

INSULATION KIT, 1 1/4" TRANSIT BAR
OR GAUGE ROD.
PART NO. HL031098-000



INSULATION PLATE, 2 1/2" BOLT CENTERS
FOR 3/4" BOLT. 1/8" THICK
PART NO. HL194101-000

INSULATOR BUSHING FOR 3/4" BOLT.
31/32" LONG FOR 3/4" TRANSIT BAR.
PART NO. HL024109-002

INSULATOR BUSHING FOR 3/4" BOLT.
1 7/32" LONG FOR 1" TRANSIT BAR.
PART NO. HL024109-000

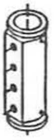
INSULATOR BUSHING FOR 3/4" BOLT.
1 15/32" LONG FOR 1 1/4" TRANSIT BAR.
PART NO. HL024109-001

PLATE, CONNECTOR 1/2" STEEL.
2 1/2" BOLT CENTERS FOR 3/4" BOLT.
PART NO. HL061141-000

REPLACEMENT PARTS

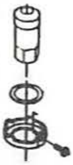
SWITCH LAYOUTS

ADJUSTMENT BASKETS:



ADJUSTMENT BASKET BODY, VERTICAL.
PART NO. HL001187-001

ADJUSTMENT BASKET BODY HORIZONTAL.
PART NO. HL001184-001



ADJUSTING NUT CASTING 1 1/4"- 7 THREAD.
PART NO. HL001185-001

WASHER, RETAINING 2 7/16" I.D. X 3 1/4" O.D.
5/64" THICK. FOR ALL TYPE ADJUSTMENT BASKETS.
PART NO. HL108197-000

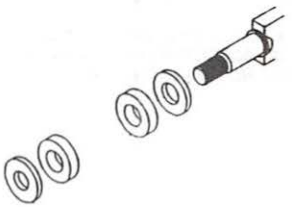
RETAINING BASKET KIT (INCLUDES MOUNTING SCREW).
PART NO. HL071922-000

ADJUSTMENT BASKET BODY, VERTICAL.
PART NO. HL001140-001

RETAINING RING WITH BOLT KIT
PART NO. HL001149-001

ADJUSTING NUT CASTING 1 1/4" - 7 THREAD.
PART NO. HL001165-003

POINT LUGS:



WASHER, TAPER SHANK, FOR SPRING
PART NO. HL071814-000

SPRING, TAPER SHANK.
PART NO. HL105118-000

WASHER, STRAIGHT SHANK, STEEL.
2" O.D. X 1" I.D. X 1/4" THICK.
PART NO. HL071094-000

WASHER, STRAIGHT SHANK, STEEL.
2" O.D. X .890" I.D. X 1/4" THICK.
PART NO. HL071094-001

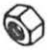
WASHER, STRAIGHT SHANK, RUBBER.
2 1/4" O.D. X 1" X 1/2" THICK.
PART NO. HL103103-000

REPLACEMENT PARTS

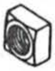
SWITCH LAYOUTS

HARDWARE:

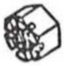
NUT HEAVY HEX
3/4" - 10.
PART NO.



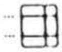
NUT HEAVY SQUARE
3/4" - 10.
PART NO.



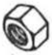
NUT SLOTTED HEAVY HEX
3/4" - 10.
PART NO.



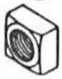
NUT HEAVY HEX JAM
1" - 8 X 9/16" THICK.
PART NO.



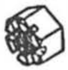
NUT HEAVY HEX
1" - 8.
PART NO.



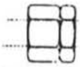
NUT HEAVY SQUARE
1" - 8.
PART NO.



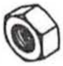
NUT SLOTTED HEAVY HEX
1" - 8.
PART NO.



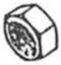
NUT HEAVY HEX JAM
1 1/4" - 7 X 11/16" THICK.
PART NO.



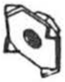
NUT HEAVY HEX
1 1/4" - 7
PART NO.



NUT, CUPPED HEAVY HEX
1 1/4" - 7.
PART NO. HL071126-000

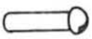


GRIP NUT 3/4" - 10
PART NO. HL051905-000



GRIP NUT 7/8" - 9.
PART NO. HL051905-000

RIVET BLACK ROUND HEAD
1/4" X 1 11/16"
PART NO.



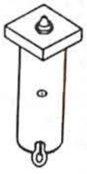
REPLACEMENT PARTS

SWITCH LAYOUTS

CONNECTOR PINS:

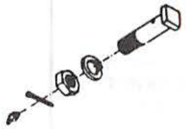
CONNECTOR PIN 7/8" X 2 1/4" LONG.
WITH COTTER PIN AND GREASE FITTING.
PART NO. HL996124-000

CONNECTOR PIN 7/8" X 2 1/2" LONG.
WITH COTTER PIN AND GREASE FITTING.
PART NO. HL996124-000



CONNECTOR PIN (THREADED) 7/8" X 2 1/2" LONG. WITH COTTER PIN, LOCK WASHER, NUT, AND GREASE FITTING.
PART NO. HL996015-000

CONNECTOR PIN (THREADED) 7/8" X 2 3/4" LONG. WITH COTTER PIN, LOCK WASHER, NUT, AND GREASE FITTING.
PART NO. HL996015-000

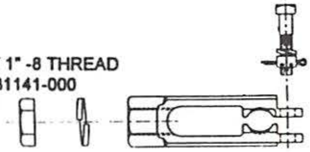


SCREW JAWS:

SCREW JAW 1 1/4" - 7 THREAD.
PART NO. HL001196-001

Point Detector Connecting Lug

SCREW JAW KIT 1" -8 THREAD
PART NO. HL031141-000



LEVER LATCH STAND:

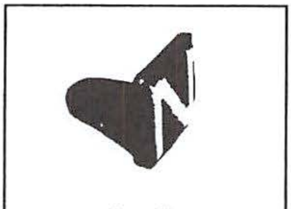
UNIVERSAL LEVER LATCH STAND
PART NO. HLSF-01

Universal Lever Latch Stand

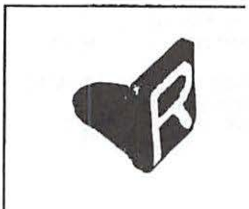
SWITCH LEVER LETTERS:

LETTER "N"
PART NO. HLSF-08

LETTER "R"
PART NO. HLSF-09



Letter "N"



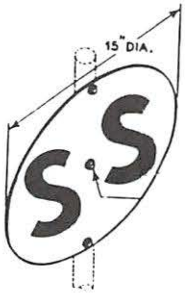
Letter "R"

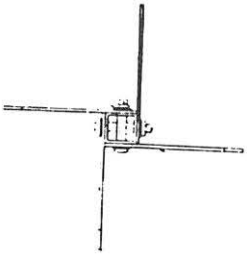
REPLACEMENT PARTS

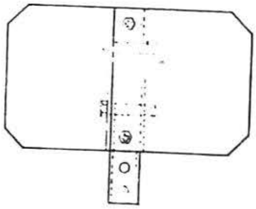
SWITCH LAYOUTS

SIGNS:

SPRING SWITCH MARKER SIGN
DOUBLE FACED, BLACK LETTERS
ON SILVER REFLECTIVE TAPE.
PART NO.







L & W INDUSTRIES

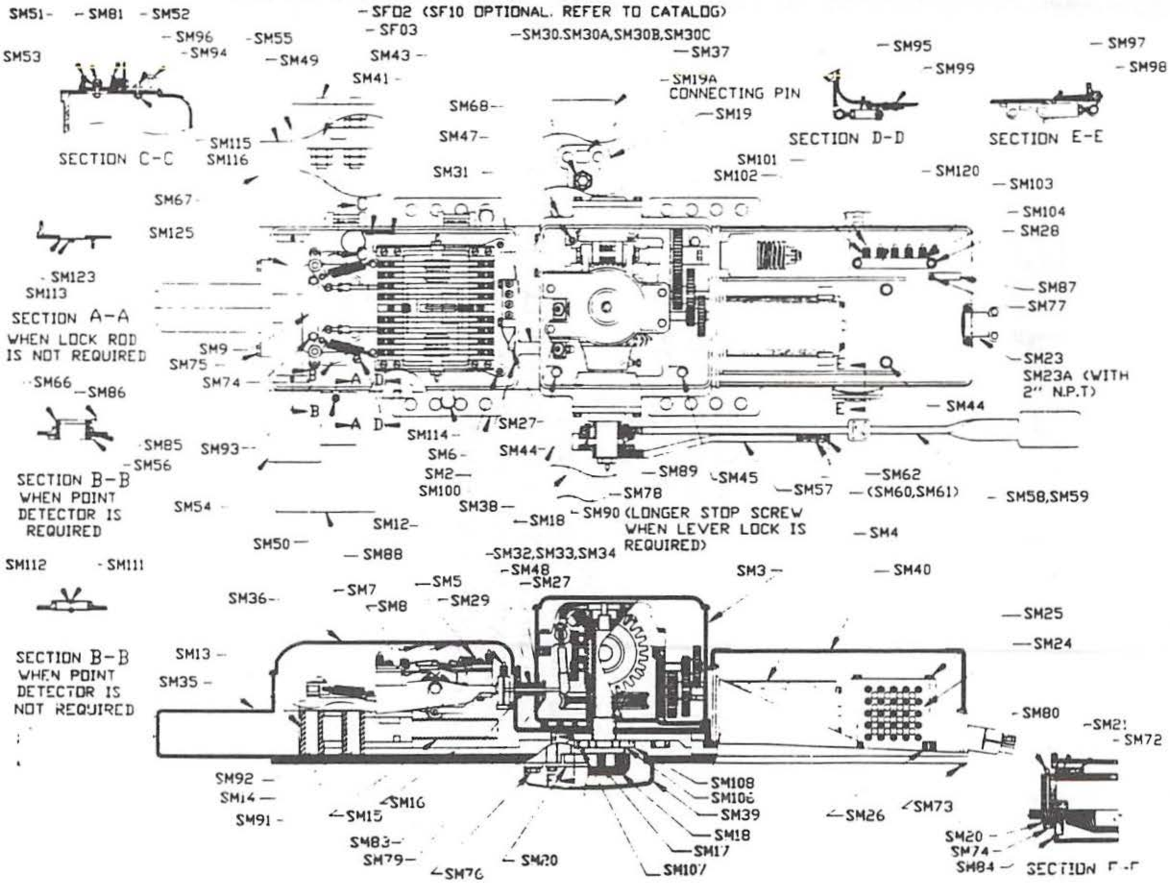
SWITCH

MACHINES

M-23A & M-23B SWITCH MACHINE PARTS
M-3, M-23A & M-23B CIRCUIT CONTROLLER
M-23A & M-23B GEAR BOX PARTS
DA-10 AIR MACHINE PARTS
NA-15 AIR MACHINE PARTS
A5 AIR MACHINE PARTS
U-5 SWITCH CIRCUIT CONTROLLER PARTS
GRS SWITCH MACHINE PARTS
7J & 7K CIRCUIT CONTROLLER PARTS

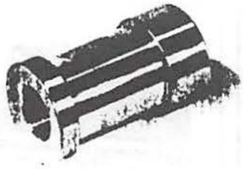
M23-A AND M23-B SWITCH MACHINE PARTS

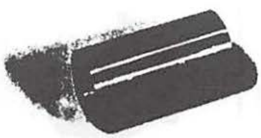
L & W INDUSTRIES



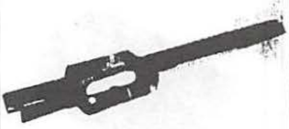
SM51
SM81
SM52
SM53
SM96
SM94
SM55
SM49
SF02 (SF10 OPTIONAL. REFER TO CATALOG)
SF03
SM43
SM41
SM30,SM30A,SM30B,SM30C
SM37
SM19A CONNECTING PIN
SM19
SM68
SM47
SM31
SM95
SM99
SM97
SM98
SECTION C-C
SM115
SM116
SECTION D-D
SECTION E-E
SM101
SM102
SM120
SM103
SM67
SM125
SM104
SM28
SM123
SM113
SECTION A-A WHEN LOCK ROD IS NOT REQUIRED
SM9
SM75
SM74
SM87
SM77
SM23
SM23A (WITH 2" N.P.T)
SM66
SM86
B
A
D
E
SM27
SM44
SM114
SM6
SM85
SM56
SM93
SM44
SM2
SM100
SM89
SM45
SM57
SM62
(SM60,SM61)
SM58,SM59
SECTION B-B WHEN POINT DETECTOR IS REQUIRED
SM54
SM78
SM38
SM18
SM90 (LONGER STOP SCREW WHEN LEVER LOCK IS REQUIRED)
SM12
SM4
SM50
SM88
SM32,SM33,SM34
SM48
SM27
SM3
SM40
SM112
SM111
SM36
SM7
SM8
SM5
SM29
SM25
SM24
SECTION B-B WHEN POINT DETECTOR IS NOT REQUIRED
SM13
SM35
SM80
SM21
SM72
SM92
SM14
SM91
SM16
SM15
SM83
SM79
SM76
SM20
SM108
SM106
SM39
SM18
SM17
SM107
SM26
SM73
SM20
SM74
SM84
SECTION F-F

Replacement Parts For M-23A and M-23B Switch Machine For Single Switch Assembly


Guide Roller


Guide Roller

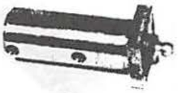
Locking Bar

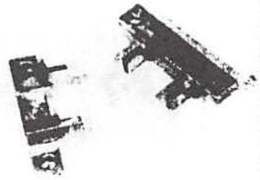

Slide Bar CAM (Inc. Studs & Roller)

Operation Roller

Operating Bar

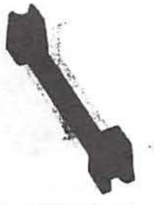
Operating Bar Lug


Connecting Pin

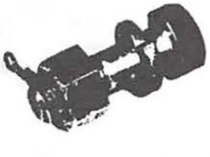

Wearing Bracket

Conduit Outlet

Conduit Liquid Tite Outlet (New Design)*


Terminal Board Support

Motor Cutout Push Rod


Bar Lug Bolt - 7/8 "9 x 3" HX. HD. Comp. W/
Lock Washer, Slotted Nut & Kotter Pin

Pipe Nipple

Replacement Parts For M-23A and M-23B Switch Machine For Single Switch Assembly

Lock Nut

Slide Bar Cover

Circuit Controller Cover

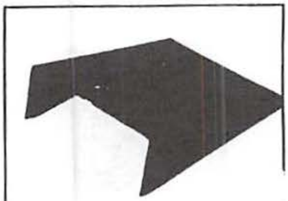
Operating Bar Cover (Track Side)

Operating Bar Cover (Field Side)

Crank Case Cover

Motor Cover

Motor Cutout Push Rod Spring

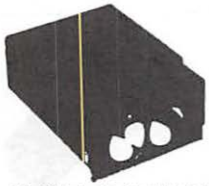


Lock Rod Cover (Track Side)

Lock Rod Cover Scraper

Plate

Point Detector Bar Cover (Field Side)



Point Detector Bar Cover (Track Side)

Lock Nut

Selector Lever

Replacement Parts For M-23A and M-23B Switch Machine For Single Switch Assembly

Hand-Throw Lever

Bushing, Point Detector

Bushing

Bushing

Lock Washer

Long Closed Lock Rod Cover - Field Side

Beveled Washer

Stud

Stud

Lock Rod Support

Hinge Lug

Adjustable Hasp

Eccentric Stud

Hasp

Strap

L & W INDUSTRIES

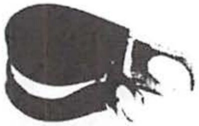
Replacement Parts For M-23A and M-23B Switch Machine For Single Switch Assembly

Point Detector Bar
Item #125 "J" Mfg. #SM-125

Motor Cut Out Insulation Board
Item #138 "J" Mfg. #SM-138

Motor Cut Out Terminal Post Cap
Item #139 "J" Mfg. #SM-139

Motor Cut Out Terminal Post Insulation Tube
Item #140 "J" Mfg. #SM-140


Circuit Controller Wire Harness Grommet
Item #140-A "J" Mfg. #SM-140-A

PARTS LIST AND ORDERING REFERENCE

ITEM NO.	DESCRIPTION	PART NUMBER
13	GUIDE ROLLER	HGSM-13
14	GUIDE ROLLER	HGSM-14
15	LOCKING BAR	HGSM-15
16	SLIDE BAR CAM (INCLUDING STUDS AND ROLLER)	HGSM-16
17	OPERATION ROLLER	HGSM-17
18	OPERATION BAR	HGSM-18
19	OPERATION BAR LUG	HGSM-19
19A	CONNECTION PIN	HGSM-19A
20	WEARING BRACKET	HGSM-20
23	CONDUIT OUTLET	HGSM-23
23A	CONDUIT LIQUID TIGHT OUTLET (NEW DESIGN)	HGSM-23A
26	TERMINAL BOARD SUPPORT	HGSM-26
27	MOTOR CUTOUT PUSH ROD	HGSM-27
30	BAR LUG BOLT - 7/8"-9 X 3" HEX HEAD. COMPLETE WITH LOCK WASHER,SLOTTED NUT AND COTTER PIN.	HGSM-30
31	PIPE NIPPLE	HGSM-31
34	LOCK NUT	HGSM-34
35	SLIDE BAR COVER	HGSM-35
36	CIRCUIT CONTROLLER COVER	HGSM-36
37	OPERATING BAR COVER	HGSM-37
38	OPERATING BAR COVER	HGSM-38
39	CRANK CASE COVER	HGSM-39
40	MOTOR COVER	HGSM-40
48	MOTOR CUT OUT PUSH ROD SPRING	HGSM-48
49	LOCK ROD COVER	HGSM-49
51	LOCK ROD COVER SCRAPER	HGSM-51
52	PLATE	HGSM-52
54	POINT DETECTOR BAR COVER	HGSM-54
55	POINT DETECTOR BAR COVER	HGSM-55

M23-A AND M23-B SWITCH MACHINE PARTS

PARTS LIST AND ORDERING REFERENCE(CONT)

ITEM NO.	DESCRIPTION	PART NUMBER
56	LOCK NUT	HGSM-56
57	SELECTOR LEVER	HGSM-57
58	HAND THROW LEVER	HGSM-57
60	MOTOR PLATE	HGSM-60
61	HAND PLATE	HGSM-61
66	BUSHING, POINT DETECTOR	HGSM-66
67	COVER PLATE	HGSM-67
79	BUSHING	HGSM-79-B
83	BUSHING	HGSM-83-B
85	LOCK WASHER	HGSM-85
88A	LONG CLOSED LOCK ROD COVER-TRACK SIDE	HGSM-88A
88	LONG CLOSED LOCK ROD COVER-FIELD SIDE	HGSM-88
88B	BEVELED WASHER	HGSM-88B
91	STUD	HGSM-91
92	STUD	HGSM-92
93	LOCK ROD SUPPORT	HGSM-93
94	HINGE LUG	HGSM-94
95	ADJUSTABLE HASP	HGSM-95
96	ECCENTRIC STUD	HGSM-96
97	HASP	HGSM-97
120	STRAP	HGSM-120
125	POINT DETECTOR BAR	HGSM-125
138	MOTOR CUT OUT TERMINAL POST CAP	HGSM-138
139	MOTOR CUT OUT TERMINAL POST CAP	HGSM-139
140	MOTOR CUT OUT TERMINAL POST INSULATION TUBE	HGSM-140
140A	CIRCUIT CONTROLLER WIRE HARNESS GROMMET	HGSM-140-A

M23-A AND M23-B SWITCH MACHINE PARTS

INTERNAL LOCK RODS:

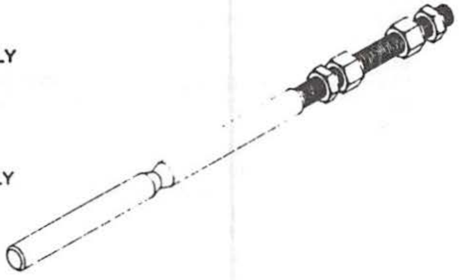
INTERNAL LOCK ROD ADJUSTABLE FOR
RIGHT HAND AND LEFT HAND OPERATION.
PART NO. HG996180-000

INTERNAL LOCK ROD FOR RIGHT HAND
AND LEFT HAND OPERATION.
PART NO. HG996188-000

INTERNAL POINT DETECTOR RODS:

INTERNAL POINT DETECTOR ROD ASSEMBLY
FOR M22 SWITCH MACHINE. 28" LONG.
PART NO. HG996119-000

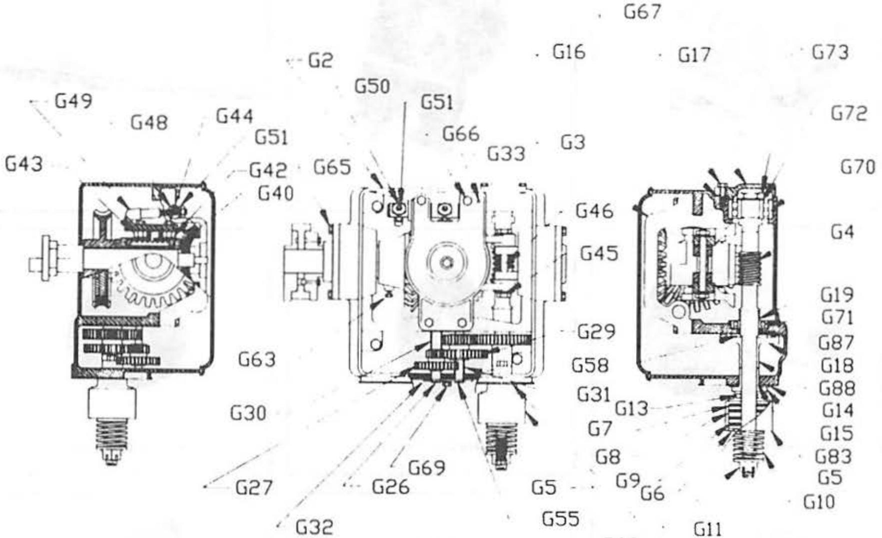
INTERNAL POINT DETECTOR ROD ASSEMBLY
FOR M23 SWITCH MACHINE 31 1/4" LONG.
PART NO. HG996189-000

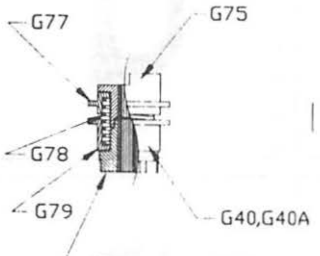


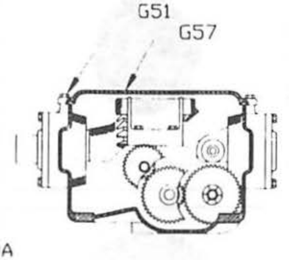
SWITCH TARGETS:

BULZI TARGET INDICATOR
PART NO. HGSF-50

M23-A AND M23-B GEAR BOX PARTS


G67
G2
G16
G17
G73
G49
G50
G51
G48
G44
G51
G66
G72
G43
G42
G65
G33
G3
G70
G40
G46
G4
G45
G19
G71
G29
G87
G63
G58
G18
G88
G31
G13
G14
G30
G7
G15
G8
G83
G69
G5
G27
G26
G5
G9
G6
G10
G32
G55
G11
G68


G77
G75
G78
G79
G40,G40A
G76



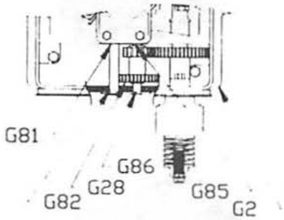
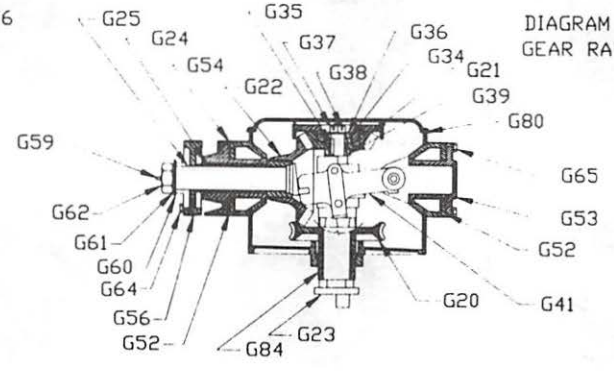

G81
G86
G82
G28
G85
G2

DIAGRAM OF 189 TO 1 GEAR RATIO ASSEMBLY


G25
G35
G24
G37
G36
G54
G38
G34
G21
G22
G39
G80
G59
G65
G62
G53
G61
G52
G60
G64
G56
G20
G41
G52
G23
G84

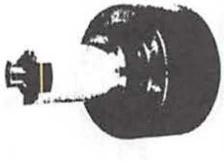
L&W

Replacement Parts For Gear Box For M-23A and M-23B Switch Machines Part List

Gear Box (Includes Bushing & Oil Seals)

Top Bearing

Worm Shaft



Friction Clutch Housing

Friction Clutch End Plate

Friction Clutch Disc

Friction Clutch Spring

Friction Clutch Adj. Nut

Plate

Bearing Cap

Clutch Gear (Includes Bushing, Item #88)

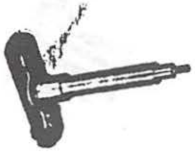
Spacer

Worm Gear*

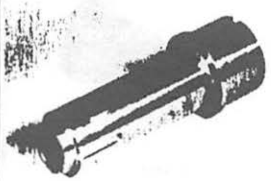
Hand-Throw Bevel Pinion For Style M-23A

Hand-Throw Bevel Gear

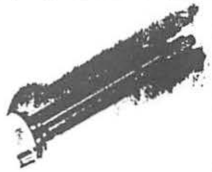
Replacement Parts For Gear Box For M-23A and M-23B Switch Machines Part List



Main Crank (5 Spline)



Hand-Throw Lever Shaft



Selector Lever Shaft

Shaft

First Reduction Gear (360 to 1 Gear Ratio)

Second Reduction Gear (360 to 1 Gear Ratio)

Spacer

Spacer

Shaft End Plate

Dowel

Bushing

Bushing

Selector Clutch (For 5 Spline Main Crank)

Selector Clutch Yoke

Roller

Replacement Parts For Gear Box For M-23A and M-23B Switch Machines Part List

Roller

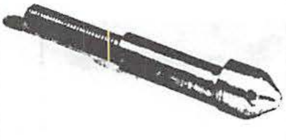
Roller Stud

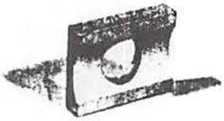
Eccentric Bushing

Shaft

Cam Follower Link

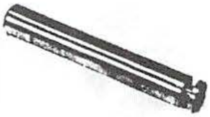
Washer


Cutout Rod Adj. Link


Washer

Yoke Support

Lever Shaft Bearing


Shaft

Lever Support

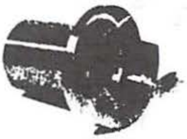
Gear Box Cover

Bushing Oilite

Lock Nut

L & W INDUSTRIES

Replacement Parts For Gear Box For M-23A and M-23B Switch Machines Part List



Clutch For 5 Spline Main Crank (For Hand Operation)

Clutch For 5 Spline Main Crank (For Motor Operation)

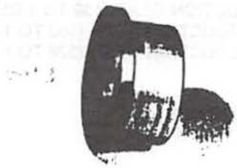
Upper Clutch Cup

Lower Clutch Cup

Bushing

Bushing

Bushing



Bushing

Bushing

Bushing

L & W INDUSTRIES

M23-A AND M23-B GEAR BOX PARTS
REPLACEMENT PARTS AND ORDERING REFERENCE

ITEM NO	DESCRIPTION	PART NO.
2	GEAR BOX (INCLUDES BUSHING AND OIL SEALS)	HGG2
3	TOP BEARING	HGG3
4	WORM SHAFT	HGG4
5	FRICTION CLUTCH HOUSING	HGG5
6	FRICTION CLUTCH END PLATE	HGG6
9	FRICTION CLUTCH DISC	HGG9
10	FRICTION CLUTCH SPRING	HGG10
11	FRICTION CLUTCH ADJUSTMENT NUT	HGG11
15	PLATE	HGG15
17	BEARING CUP	HGG17
18	CLUTCH GEAR (INCLUDES BUSHING, ITEM #88)	HGG18
19	SPACER	HGG19-S
20	WORM GEAR	HGG20
21	HAND-THROW BEVEL PINION FOR M23-A MACH.	HGG21
21A	HAND-THROW BEVEL PINION FOR M22-A MACH.	HGG21A
22	HAND-THROW BEVEL GEAR	HGG22
23	MAIN CRANK (5 SPLINE)	HGG23
23A	MAIN CRANK (10 SPLINE)	HGG23A
24	HAND-THROW LEVER SHAFT	HGG24
25	SELECTOR LEVER SHAFT	HGG25
26	SHAFT	HGG26
27	FIRST REDUCTION GEAR (360 TO 1 GEAR RATIO)	HGG27
27A	FIRST REDUCTION GEAR (528 TO 1 GEAR RATIO)	HGG27A
28	FIRST REDUCTION GEAR (189 TO 1 GEAR RATIO)	HGG28
29	SECOND REDUCTION GEAR (360 TO 1 RATIO)	HGG29
29A	SECOND REDUCTION GEAR (528 TO 1 RATIO)	HGG29A
30	SPACER	HGG30
31	SPACER	HGG31
32	SHAFT END PLATE	HGG32
33	DOWEL	HGG33
34	BUSHING	HGG34-B
39	BUSHING	HGG39-B
40	SELECTOR CLUTCH (FOR 5 SPLINE MAIN CRANK)	HGG40-5
40A	SELECTOR CLUTCH (FOR 10 SPLINE MAIN CRANK)	HGG40A-10
41	SELECTOR CLUTCH YOKE	HGG41
42	ROLLER	HGG42
43	ROLLER	HGG43
44	ROLLER STUD	HGG44
45	ECCENTRIC BUSHING	HGG45-B
48	SHAFT	HGG48
49	CAM FOLLOWER LINK	HGG49
49A	WASHER	HGG49A
50	CUTOUT ROD ADJUSTMENT LINK	HGG50
51	WASHER	HGG51
53	YOKE SUPPORT	HGG53
54	LEVER SHAFT BEARING	HGG54
55	SHAFT	HGG55
56	LEVER SUPPORT	HGG56
57	GEAR BOX COVER	HGG57

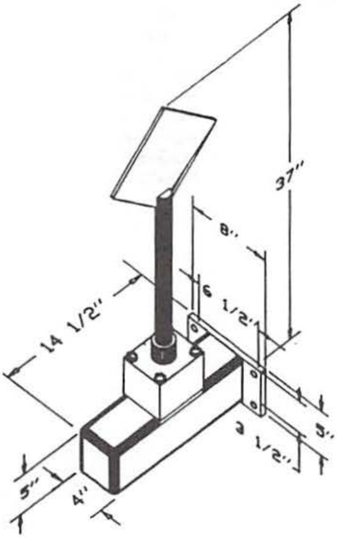
M23-A AND M23-B GEAR BOX PARTS
REPLACEMENT PARTS AND ORDERING REFERENCE

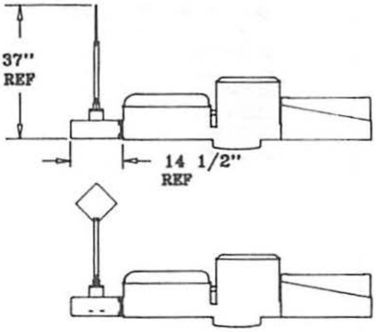
ITEM NO.	DESCRIPTION	PART NO.
58	BUSHING OILITE	HGG58-B
73	LOCK NUT	HGG73
75	CLUTCH FOR 5 SPLINE MAIN CRANK (HAND OPER.)	HGG75
75A	CLUTCH FOR 10 SPLINE MAIN CRANK(HAND OPER)	HGG75A
76	CLUTCH FOR 5 SPLINE MAIN CRANK (MOTOR OP.)	HGG76
76A	CLUTCH FOR 10 SPLINE MAIN CRANK(MOTOR OP)	HGG76A
77	UPPER CLUTCH SPRING	HGG77
78	SELECTOR CLUTCH CUP	HGG78
79	LOWER CLUTCH CUP	HGG79
81	BUSHING	HGG81-B
82	BUSHING	HGG82-B
83	BUSHING	HGG83-B
84	BUSHING	HGG84-B
85	BUSHNG	HGG85-B
86	BUSHING	HGG86-B

L & W INDUSTRIES

New, Innovative "Bulzi Target Indicator" .... will save you time labor and money!

The Bulzi Target Indicator, P/N SF-50 eliminates the necessity of installing a High Star and U-5 Controller Box prior to the installation of the Switch Machine. This makes for an immediate, one time installation, thus saving you time, labor, and money.





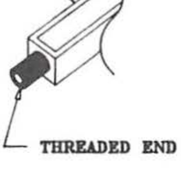
This compact unit is designed to fit directly onto the end of the Controller Box and is driven by the motion of the lock box and slide bar.

It will function whether the Switch Machine is being operated electrically or manually.

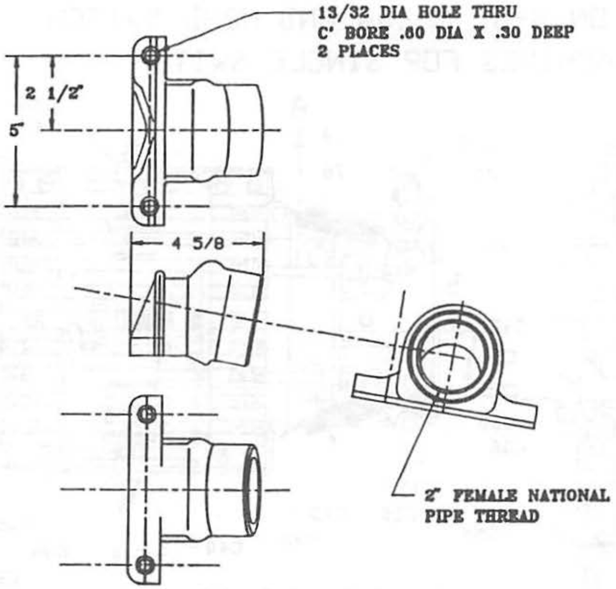
FEATURES:

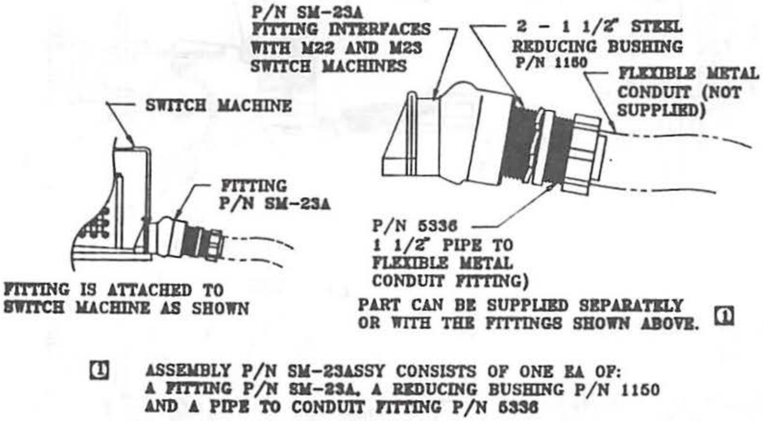
1. **The Bulzi Target Indicator is universal for all point and turnout configurations.**
2. **The Bulzi Operating Arm has a break away protection sheer pin system, for quick easy repair in the event of damages by dragging equipment or vandalism.**

NOTE:
It is necessary that the switch machine is equipped with a lock box that has a threaded end (as per illustration) for easy installation.
If it is not equipped with this style of box, it is important that one is ordered with your Bulzi Target Indicator.
Lock Box - P/N - SM-15.



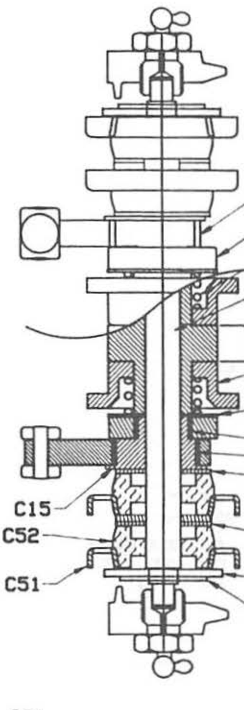
FITTING, LIQUID TIGHT CONDUIT TO SWITCH MACHINE

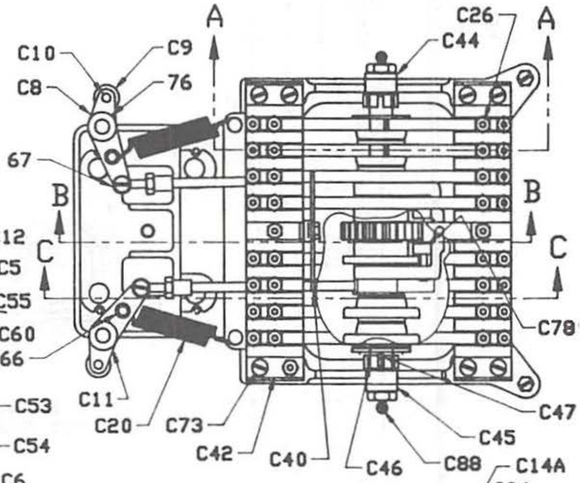

13/32 DIA HOLE THRU
C' BORE .60 DIA X .30 DEEP
2 PLACES
2 1/2"
5"
4 5/8
2" FEMALE NATIONAL
PIPE THREAD

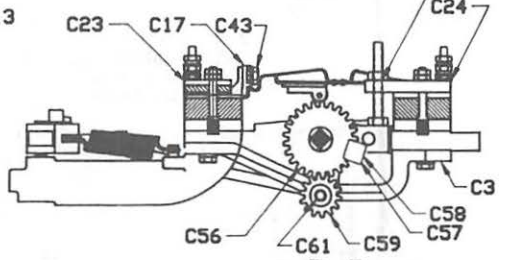

P/N SM-23A
FITTING INTERFACES
WITH M22 AND M23
SWITCH MACHINES
2 - 1 1/2" STEEL
REDUCING BUSHING
P/N 1150
FLEXIBLE METAL
CONDUIT (NOT
SUPPLIED)
SWITCH MACHINE
FITTING
P/N SM-23A
P/N 5336
1 1/2" PIPE TO
FLEXIBLE METAL
CONDUIT FITTING)
FITTING IS ATTACHED TO
SWITCH MACHINE AS SHOWN
PART CAN BE SUPPLIED SEPARATELY
OR WITH THE FITTINGS SHOWN ABOVE. [1]

[1] ASSEMBLY P/N SM-23ASSY CONSISTS OF ONE EA OF:
A FITTING P/N SM-23A, A REDUCING BUSHING P/N 1150
AND A PIPE TO CONDUIT FITTING P/N 5336

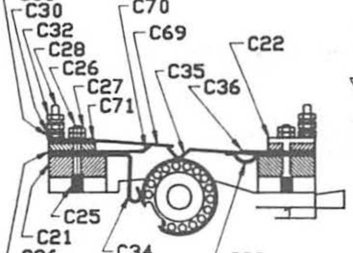
INDICATION CIRCUIT CONTROLLER WITH SELECTIVE POINT DETECTOR USED ON M-3, M-23A AND M23B SWITCH MACHINES FOR SINGLE SWITCH


C12
C5
C55
C60
C66
C53
C54
C6
C13
C79
C15
C52
C50
C51
C49
C48

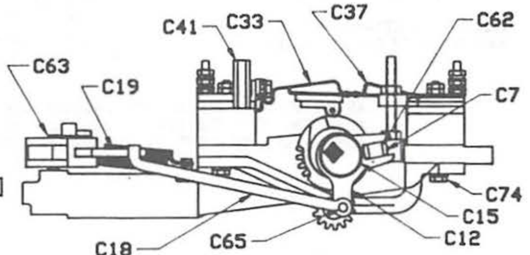

A
A
C26
C44
C10
C9
C8
76
67
B
B
C
C
C78
C47
C11
C20
C73
C42
C40
C46
C88
C45


C14A
C24
C23
C17
C43
C3
C58
C57
C56
C61
C59

SECTION B-B


C31
C30
C32
C28
C26
C27
C71
C70
C69
C35
C36
C22
C25
C21
C36
C34
C38

SECTION A-A


C41
C33
C37
C62
C63
C19
C7
C74
C15
C12
C18
C65

SECTION C-C

M23-A AND M23-B SWITCH MACHINE PARTS

INDICATION CIRCUIT CONTROLLER FOR M 23A, M23B, AND M3 SWITCH MACHINE
PARTS LIST AND ORDERING REFERENCE

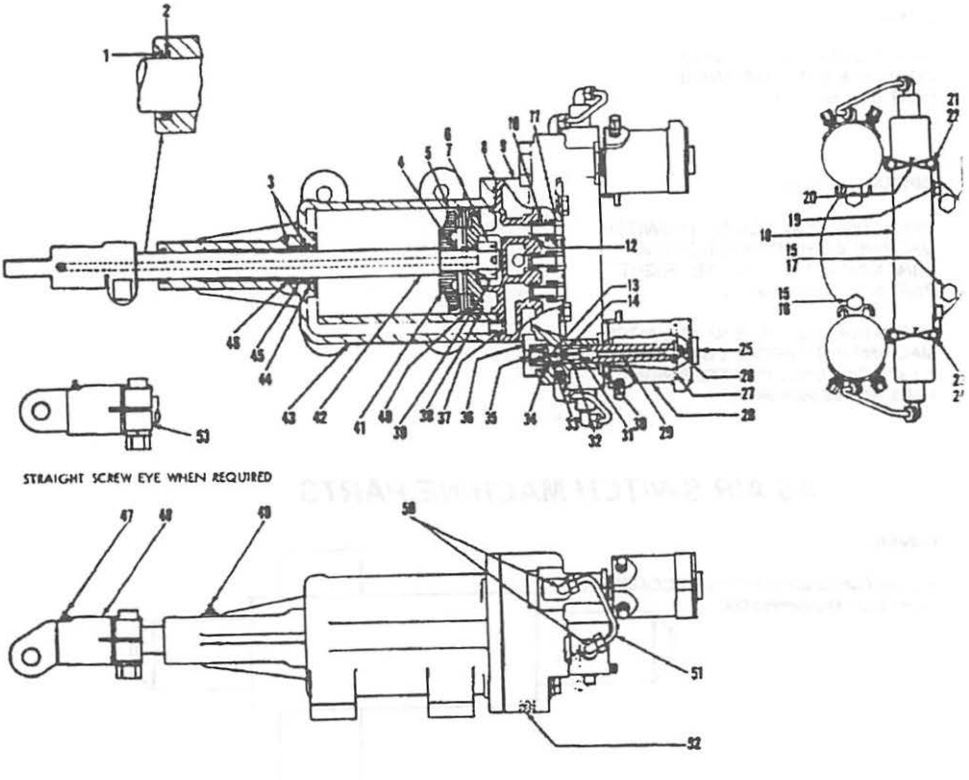
ITEM	DESCRIPTION	PART NUMBER
Aa	INDICATION CIRCUIT CONTROLLER COMPLETE WITH ADJUSTABLE YOKE STOP	HGC-Aa
6	BUSHING	HGC-6
7	BUSHING FOR USE WITH SQUARE HEAD PIN (REFERENCE ITEM 62)	HGC-7
8	LEFT HAND CRANK, INCLUDES ROLLER AND PIN (REFERENCE ITEM 9 AND 10)	HGC-8
9	ROLLER	HGC-9
10	PIN	HGC-10
11	RIGHT HAND CRANK, INCLUDES ROLLER AND PIN (REFERENCE ITEM 9 AND 10)	HGC-11
13	OPERATING LEVER BUSHING	HGC-13
14A	ADJUSTABLE YOKE STOP	HGC-14A
19	EYE ROD	HGC-19
33	CONTACT SPRING	HGC-33
34	CONTACT SPRING	HGC-34
35	CONTACT SPRING	HGC-35
36	REINFORCING SPRING	HGC-36
37	REINFORCING SPRING	HGC-37
38	REINFORCING SPRING	HGC-38
44	TRUNION	HGC-34
45	TRUNION	HGC-45
51	CONTACT SEGMENT	HGC-51
53	INDICATION CAM	HGC-53
62	PIN, SQUARE HEAD	HGC-62
67	SCREW	HGC-67
69	CONTACT SPRING	HGC-69
70	STOP SPRING	HGC-70
98	WIRE HARNESS GROMMET	HGC-98

DA-10 AIR SWITCH MACHINE PARTS

STYLE DA-10 SWITCH MACHINE:

PART NO. & ITEM NO.		DESCRIPTION	WABCO NO.
HGDA-01		RING, RETAINER	J792183
HGDA-02		WIPER	J791579
HGDA-03		RING, PACKING BACK-UP, 2EA/KIT	M371990
HGDA-04		RING, 1 X 1 1/4 "O", 2EA/KIT	J067427
HGDA-05		PACKING, 2EA/KIT	J067421
HGDA-06		COTTER, 3/16" X 2" STEEL T.P.C.2EA/KIT	J048636
HGDA-07		NUT, 1"-14 HEX,SLOTTED STEEL CAD P.C.1	J480160
HGDA-08		GASKET, CYLINDER HEAD	M371998
HGDA-09		CHAMBER, VALVE	M371971
HGDA-10		COUPLING, VALVE, 3EA/KIT	M372046
HGDA-11		CONNECTOR, VALVE, 3EA/KIT	M372047
HGDA-12		RING, 5/8 X 13/16 "O", 8EA/KIT	J067130
HGDA-13		RING, 11/16 X 7/8 "O", 2EA/KIT	J067123
HGDA-14		RING, 5/8 X 13/16 "O", 2EA/KIT	J067130
HGDA-15		WASHER, 1/2" STEEL LOCK XHVY 4EA/KIT	J047769
HGDA-16		SCREW, 1/2 X 4 1/2 HEX STEEL 2EA/KIT	J050025
HGDA-17		SCREW, 1/2 X 3 1/2 HEX STEEL 2EA/KIT	J050105
HGDA-18		VALVE, PILOTAIR	J337129
HGDA-19		PLUG, EXHAUST, 2EA/KIT	M372007
HGDA-20		WIRE, .052" STAINLESS STEEL 1' 3"	A047767
HGDA-21		SCREW, 5/16 X 2 1/2	M372212
HGDA-22		WASHER. 5/16" STEEL LOCK XHVY	J047767
HGDA-23		SCREW, 1/4 X 2 1/2. 3EA/KIT	M372211
HGDA-24		WASHER, 1/4" STEEL LOCK XHVY 3EA/KIT	J047766
HGDA-25		CAP, MAGNET, 2EA/KIT	M323630
HGDA-26		NUT, 2EA/KIT	M001509
HGDA-27		ARMATURE, MAGNET, 2EA/KIT	M001707H
HGDA-28		MAGNET, 130 OHM, 2EA/KIT	N371995
HGDA-29		STEM, ARMATURE, 2EA/KIT	M372015
HGDA-30		NUT, MAGNETIZED LOCK, 2EA/KIT	M371999
HGDA-31	NEEDLE	VALVE, ARMATURE, 2EA/KIT	M372014
HGDA-32	VALVE	SEAT, VALVE, 2EA/KIT	M372024
HGDA-33	KIT	VALVE, PIN, 2EA/KIT	M003100
HGDA-34		RING, SQUARE RETAINING, 2EA/KIT	J791578
HGDA-35		SPRING, VALVE 2EA/KIT	J068203
HGDA-36		NUT, VALVE CAP, 2EA/KIT	N371989
HGDA-37		BUSHING	M001091
HGDA-38		FOLLOWER, PISTON	M371968
HGDA-39		SPACER, PISTON NUT	M371985
HGDA-40		FOLLOWER, PISTON	M106286
HGDA-41		FOLLOWER, PISTON	M371967
HGDA-42		ROD, PISTON	N371987
HGDA-43		CYLINDER	M371969
HGDA-44		RING, RETAINER	J791577

DA-10 AIR SWITCH MACHINE PARTS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STRAIGHT SCREW EYE WHEN REQUIRED
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HGDA-45	RETAINER, V-RING, 2EA/KIT	J7233192
HGDA-46	PACKING, U-CUP, 2EA/KIT	J067436
HGDA-47	FITTING, 1/8" P.T. STRAIGHT LUB.	J039137
HGDA-48	EYE, SCREW	N371979
HGDA-49	FITTING 1/8" P.T.F. LUB, PRESSURE RELIEF	J032798
HGDA-50	FITTING, ELL. COMPRESSION, 4 EA/KIT	J032798
HGDA-51	TUBING, COPPER, 2EA/KIT	M372069
HGDA-52	PROTECTOR, 1/2" INT. PIPE THREAD	J032922
HGDA-53	EYE, SCREW (STRAIGHT)	M371980

NA-15 AIR MACHINE PARTS

COVER:

NA-15 COVER, HASP ASSEMBLY
COMPLETE WITH HARDWARE.
PART NO. HG3801-X

OPERATING ROD:

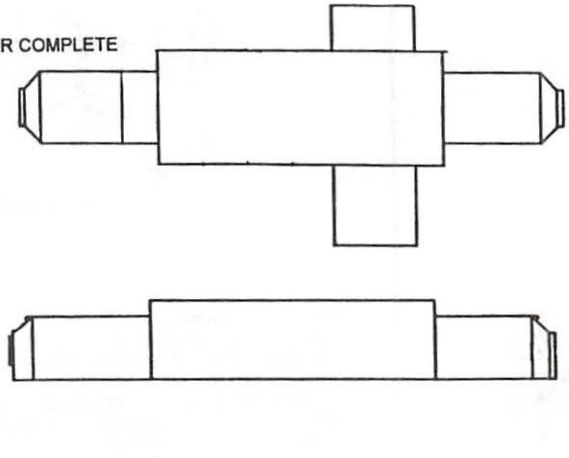
OPERATING ROD, FOR NA-15 SWITCH
MACHINE WITH BRONZE BUSHING.
1 1/4" X 64" LONG. 1" OFFSET RIGHT.
PART NO. HL996899-001

OPERATING ROD, FOR NA-15 SWITCH
MACHINE WITH BRONZE BUSHING.
1 1/4" X 78" LONG. 1" OFFSET RIGHT.
PART NO. HL996899-000

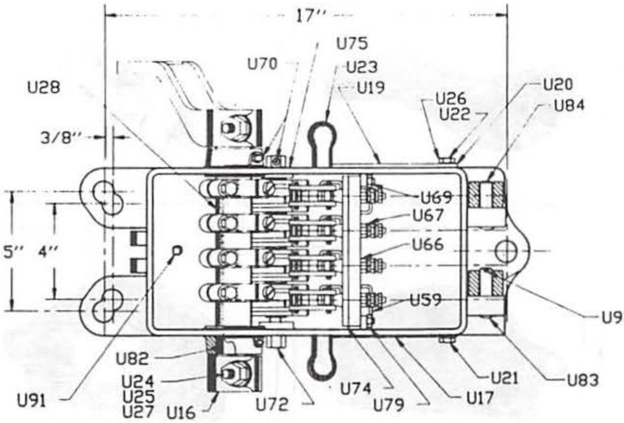
A5 AIR SWITCH MACHINE PARTS

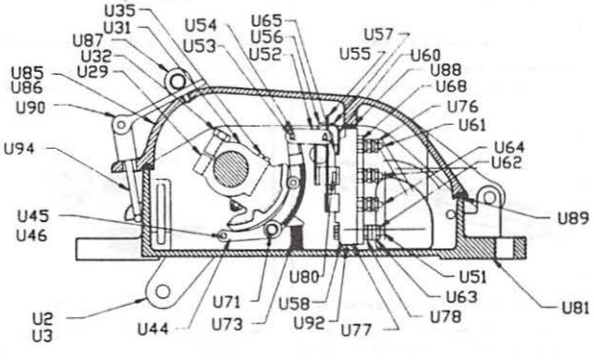
COVER:

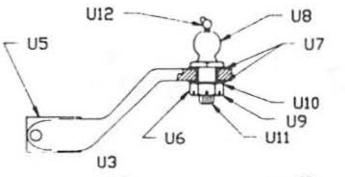
A5 SWITCH MACHINE COVER COMPLETE
PART NO. HG996660-000

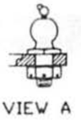


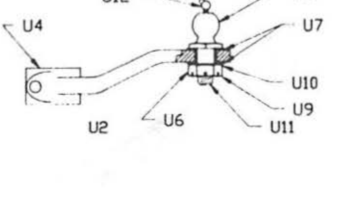
U-5 SWITCH CIRCUIT CONTROLLER

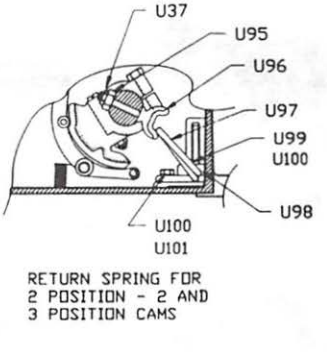

17″
U75
U70
U23
U19
U28
U26
U22
U20
U84
3/8″
U69
U67
5″
4″
U66
U59
U93
U82
U21
U83
U24
U25
U27
U16
U74
U17
U91
U72
U79


U35
U31
U87
U32
U85
U86
U29
U54
U53
U65
U56
U52
U57
U55
U60
U88
U68
U90
U76
U61
U94
U64
U62
U45
U46
U89
U80
U51
U63
U81
U71
U58
U78
U2
U3
U44
U73
U92
U77


U12
U8
U5
U7
U10
U9
U6
U11
U3

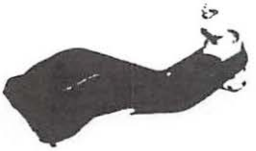



U12
U8
U4
U7
U10
U9
U6
U11
U2

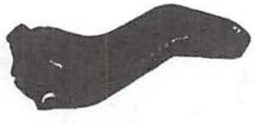

U37
U95
U96
U97
U99
U100
U98
U100
U101

RETURN SPRING FOR
2 POSITION - 2 AND
3 POSITION CAMS

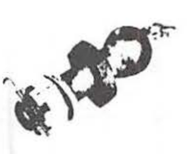
U-5 Switch Circuit Controller Part List



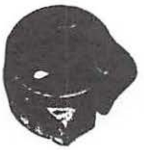
Non-Operating Crank compl., 2-13/32" offset, w/ non-insulated ball stud



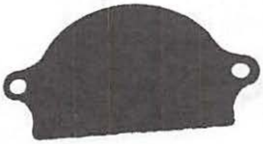
Crank Only, 2-13/32" offset (5/8" dia. reamed hole)



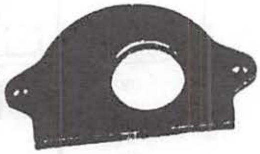
Ball Stud complete (specify size of Grease Fitting)



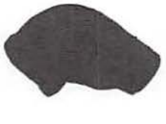
Clamp



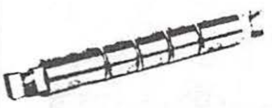
Wire Guide Plate (Blank)



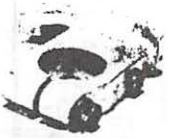
Wire Guide Plate (with 1-1/2" Tapped Hole)



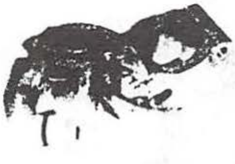
Ventilator Complete



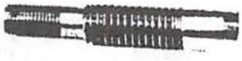
Cam Shaft (For 4-way 2-position controller)*



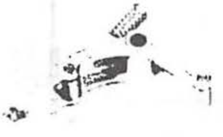
Cam Complete (2-position)



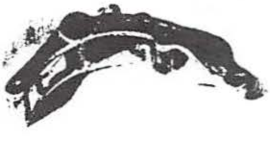
Cam Only (2-position)*



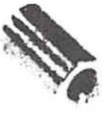
Cam Bolt, Stainless Steel Adj. Screw



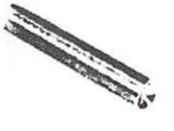
Operating Arm Complete



Operating Arm Complete



Roller, Stainless Steel



Pin

L & W INDUSTRIES

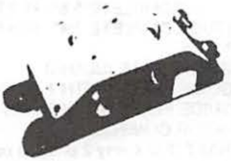
U-5 Switch Circuit Controller Part List

Phenolic Lever (Link)
Item #52

Rocker Shaft (4-way)
Item #71

Nut
Item #72

Spring
Item #73


Case (for 4-way, 2 position, 2&3 position controllers) Item #81

Bushing
Item #82

Cover Only (4-way)
Item #86

Hasp Lug
Item #87

Hasp Complete
Item #90

Operating Crank
Item #96

Return Spring Clamp
Item #98

CONDUIT ASSEMBLIES:

CONDUIT ASSEMBLY 1 1/2" GREENFIELD CONDUIT FOR U.S.& S. U5 SWITCH CIRCUIT CONTROLLER.
PART NO. HG1740-10X

L & W INDUSTRIES

U-5 SWITCH CIRCUIT CONTROLLER

PART LIST AND ORDERING REFEENCE

ITEM NO.	DESCRIPTION	PART NUMBER
2	OPERATING CRANK COMPLETE, 3/4" OFFSET WITH INSULATED BALL STUD	HGU2
2A	OPERATING CRANK COMPLETE, 3/4" OFFSET WITH NON-INSULATED BALL STUD	HGU2A
3	OPERATING CRANK COMPLETE, 2 13/32" OFFSET, WITH INSULATED BALL STUD.	HGU3
3A	OPERATING CRANK COMPLETE, 2 13/32" OFFSET, WITH NON-INSULATED BALL STUD	HGU3A
4	CRANK ONLY, 3/4" OFFSET (13/16" DIA.HOLE)	HGU4
4A	CRANK ONLY, 3/4" OFFSET (5/8" DIA. HOLE)	HGU4A
5	CRANK ONLY, 2 13/32" OFFSET (13/16"DIA.HOLE)	HGU5
5A	CRANK ONLY, 2 13/32" OFFSET (5/8"DIA.HOLE)	HGU5A
8	BALL STUD COMPLETE 5/8"- 11 STUD	HGU8
8A	BALL STUD COMPLETE 3/4"- 10 STUD	HGU8A
16	CLAMP	HGU16
17	WIRE GUIDE PLATE (BLANK)	HGU17
19	WIRE GUIDE PLATE (WITH 1 1/2" NPT HOLE)	HGU19
19A	WIRE GUIDE PLATE (WITH 2" NPT HOLE)	HGU19A
23	VENTILATOR COMPLETE	HGU23
28	CAM SHAFT (For 4-way 2 position controller)	HGU28
28A	CAM SHAFT (For 4-way combo 2 & 3 controller)	HGU28A
28B	CAM SHAFT (For 4-way 3 position controller)	HGU28B
28C	CAM SHAFT (For 6-way 2 position controller)	HGU28C
28D	CAM SHAFT(For 6-way 3 position or combo 2 & 3)	HGU28D
29	CAM COMPLETE (2 POSITION)	HGU29
32	CAM ONLY (2 POSITION)	HG032
35	CAM BOLT, STAINLESS ADJUSTING SCREW	HGU35
44	OPERATING ARM COMPLETE	HGU44
44A	OPERATING ARM ONLY	HGU44A
45	ROLLER, STAINLESS STEEL	HGU45
46	PIN	HGU46
52	PHENOLIC LEVER (LINK)	HGU52
53	PIN	HGU53
55	HEEL CONTACT	HGU55
56	REVERSE CONTACT	HGU56
57	NORMAL CONTACT	HGU57
60	SUPPORT CONTACT (REINFORCED SPRING)	HGU60
71	ROCKER SHAFT (4-WAY)	HGU71
71A	ROCKER SHAFT (6-WAY)	HGU71A
72	NUT	HGU72
73	SPRING	HGU73
81	CASE (for4-way,2 position, 2 & 3positioncontrollers)	HGU81
81A	CASE (Arranged for return spring on outside of case for 4-way3positioncontrollers)	HGU81A
82	BUSHING	HGU82
85	COVER COMPLETE (4-WAY)	HGU85
86	COVER ONLY (4-WAY)	HGU86
87	HASP LUG	HGU87
90	HASP COMPLETE	HGU90
96	OPERATING CRANK	HGU96
98	RETURN SPRING CLAMP	HGU98

G.R.S. SWITCH MACHINE PARTS

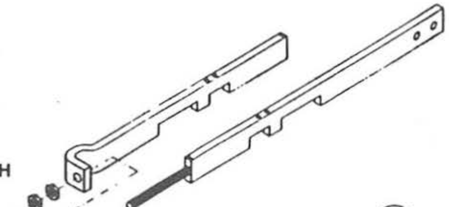
GUARDS:

GUARD FOR THROW ROD
PART NO. HL090117-000

GUARD FOR THROW ROD
PART NO. HL090182-000

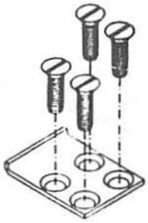
INTERNAL LOCK RODS:

INTERNAL LOCK ROD, LEFT HAND
WITH ALL HARDWARE.
PART NO. HG996117-000



INTERNAL LOCK ROD FOR SWITCH
MACHINES 5A, E, G, AND H.
PART NO. HG996842-000

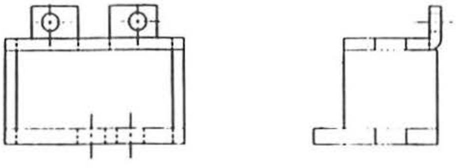
LOCK ROD CLIP KIT WITH
FOUR 5/16"- 18 x 3/4" SCREWS.
PART NO. HG031190-000



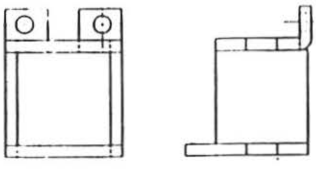
INTERNAL POINT DETECTOR RODS:

INTERNAL POINT DETECTOR ROD
COMPLETE WITH ALL HARDWARE.
PART NO. HG996118-000

WEAR PLATES:
WEAR PLATE
PART NO. HG031195-000



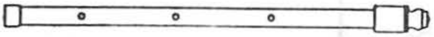
WEAR PLATE
PART NO. HG031193-000



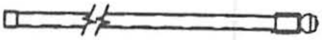
G.R.S. SWITCH MACHINE PARTS

OIL FITTINGS:

OIL TOP FITTING
PART NO. HG991118-000



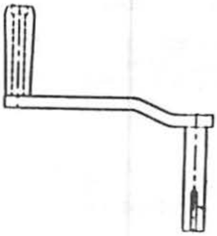
OIL BOTTOM FITTING
PART NO HG991110-000



HAND CRANKS:

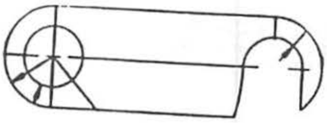
HAND CRANK FOR SWITCH MACHINE
MOTOR. 6" LONG
PART NO. HG996067-000

HAND CRANK FOR SWITCH MACHINE
MOTOR. 12" LONG.
PART NO HG996067-001



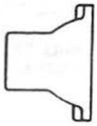
CONNECTORS:

SWITCH BOX JUMPER CONNECTOR
1 3/8" CENTERLINE OF HOLES.
PART NO. 9A2206



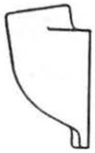
G.R.S. SWITCH MACHINE PARTS

CABLE ENTRANCE COUPLERS:



CABLE ENTRANCE COUPLER STRAIGHT
WITH 1 1/4" NPT THREADED HOLE.
PART NO. HG996870-001

CABLE ENTRANCE COUPLER STRAIGHT
WITH 1 1/2" NPT THREADED HOLE
PART NO. HG996870-002

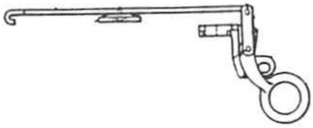


CABLE ENTRANCE COUPLER 90 DEGREE
WITH 1 1/4" NPT THREADED HOLE.
PART NO. HG996253-001

CABLE ENTRANCE COUPLER 90 DEGREE
WITH 1 1/2" NPT THREADED HOLE.
PART NO. HG996253-002

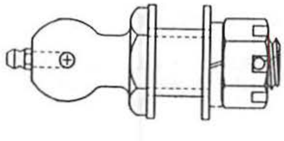
SWITCH MACHINE COVER PARTS:

LATCH ASSEMBLY FOR GRS
SWITCH MACHINE COVERS.
PART NO. HG996254-000



7J AND 7K CIRCUIT CONTROLLER PARTS

BALL STUDS:



BALL STUD 1" DIAMETER, 5/8" -11 THREADS
PART NO. HG996859-000

CONDUIT ASSEMBLIES:

CONDUIT ASSEMBLY 1 1/2" GREENFIELD
CONDUIT FOR GRS 7J AND 7K SWITCH
CIRCUIT CONTROLLER.
PART NO.

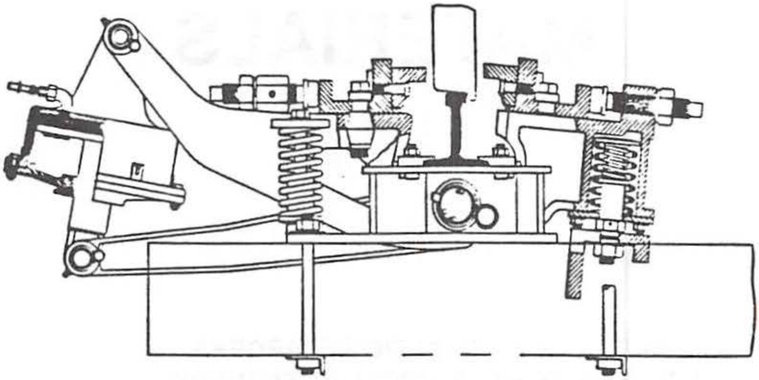
L & W INDUSTRIES

YARD

MATERIALS

ELECTRICAL PNEUMATIC RETARDERS
ELECTRICAL MECHANICAL RETARDERS
RETARDER AIR VALVES
BRAKE SHOES
BRAKE SHOE BOLTS
SWITCH LAMPS
SWITCH TERMINATION BOXES

ELECTRO PNEUMATIC & ELECTRO MECHANICAL RETARDERS



L & W INDUSTRIES MANUFACTURERS
A NUMBER OF PARTS
FOR ELECTRO PNEUMATIC
&
ELECTRO MECHANICAL
RETARDERS

THE ITEMS LISTED IN THIS SECTION ARE
ONLY THOSE ITEMS WE STOCK OR
ARE ACTIVELY MANUFACTURING.

PLEASE FEEL FREE TO CALL US AT
800-852-5587
FOR ANY ITEMS NOT LISTED.

L & W INDUSTRIES

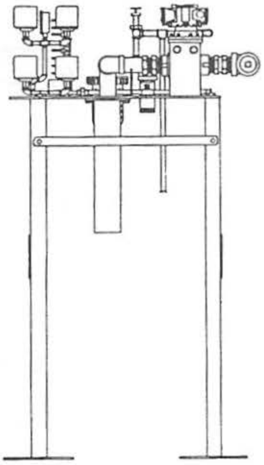
ELECTRO PNUEMATIC RETARDER VALVES

RCV-1

The L&W RCV-1 Retarder Control Valve is a pneumatic control system designed to maintain a preset air pressure value in the cylinders of an electropneumatic car-retarder. The RCV-1 Retarder Control Valve System is remotely controlled by an operator who can select between manual or automatic operation. When in manual operation the operator can select heavy, light, or off. When in automatic operation the RCV-1 Retarder Control Valve will maintain preset air pressures as called for by the automatic controls.

The L&W RCV-1 Retarder Control Valve consists of two intake valves. One being a 1-1/2" pipe size, solinoid operated, poppit type, two-way, normally closed, 12VDC valve with internal pilot-air and the second being, the same as the first, except for 3/4" pipe size. The exhaust valve is a 1-1/2" pipe size, solinoid operated, poppit type, two-way, normally closed, 12VDC valve with external pilot air. The external pilot air allows the exhaust cylinders for maintenance purposes. Pressures are set and maintained by fast acting micro-pressure switches. Supply air is filtered for oil and dirt, and all electrical components are provided with electrical surge suppression.

Maintenance is an excellent feature of the RCV-1 Retarder Control Valve. All major components such as the control valves and pressure switches can be removed without having to dismantle piping, making field maintenance simple and fast.

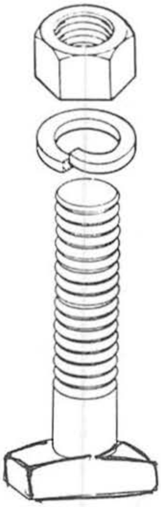


- 80-150 PSIG OPERATING PRESSURE
- 12 VDC NOMINAL OPERATING VOLTAGE
- HIGH-SPEED RESPONSE
- INDEPENDENTLY PRESET PRESSURES
- MICRO-PRESSURE SWITCHES
- ELECTRICAL SURGE SUPPRESSION
- PARTS REPLACEABLE WITHOUT REMOVING ANY PIPING

TO ORDER: Specify description and ordering reference

DESCRIPTION	ORDERING REFERENCE
RCV-1 Electropneumatic Retarder control valve Cross reference: Union N451132-0101	L&W P/N 1900-X

BRAKE SHOE BOLTS



TEE HEAD BOLTS FOR ELECTRO MECHANICAL
Bolt T-Head 3-1/4" x 1" Grade 8 Course Thread
complete w/hex nut & lockwasher
Part No. GA8800-X

For Fine Thread
Part No. GA8800-1X

Course Thread Bolt Only
Part No. GA8800 *

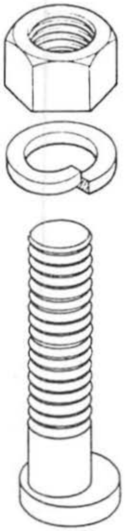
Fine Thread Bolt Only
Part No. GA8800-1 *

Nut Hex Only
For Course Thread
Part No. GA8802

For Fine Thread
Part No. GA8804

Lock Washer
For Both Course & Fine
Part No. GA8803

BOLTS FOR ELECTRO PNEUMATIC
Bolt, 3-1/4" x 7/8" Grade 8
complete with hex nut & lockwasher
Part No. GB8850-X *



Bolt Only
Part No. GB8850

Bolt, 3-3/4" x 7/8" Grade 8
complete with hex nut & lockwasher
Part No. GB8852-x *

Bolt Only
Part No. GB8852

Bolt, 4" x 7/8" Grade 8
complete with hex nut & lockwasher
Part No. GB8854-x *

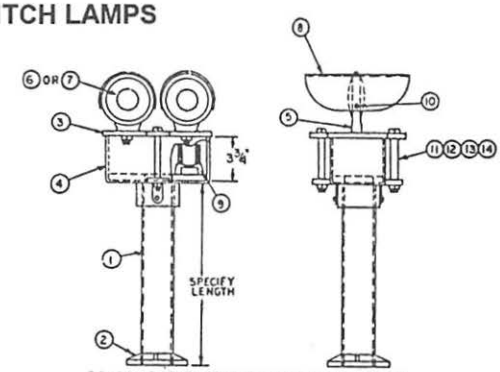
Bolt Only
Part No. GB8854

Hex Nut Only
Part No. GB9445
Part No. GB9445S (for Security Lock Nut)

Lockwasher Only
Part No. GB9520

SWITCH LAMPS

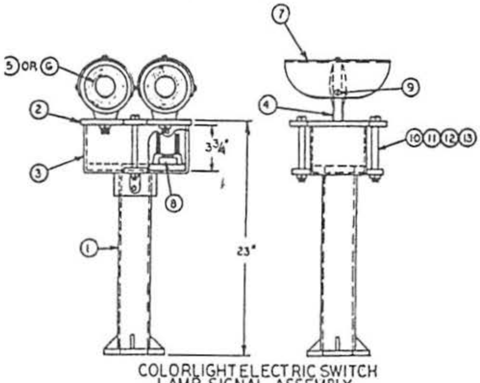
COLORLIGHT BLUE FLAG
PART NO. ZB7210-X



COLORLIGHT ELECTRIC BLUE FLAG SIGNAL
7210-X

ITEM	QTY	PART Nº	DESCRIPTION
1	1	7206	ALUMINUM PIPE
2	1	7205	PIPE BASE
3	1	72011	COVER
4	1	7202	BASE
5	2	1019 1	LENS MOUNTING RING
6	4	1029	4" YELLOW LENS
7	4	1030	4" BLUE LENS
8	2	7204	SHIELD
9	1		TERMINALS 4 GANG (AAR)
10	6		6-32 X 1/4" SCREW
11	2		3/8-16 X 5" BOLT HEX HEAD
12	2		3/8" HEX NUT
13	2		3/8" FLATWASHER

COLORLIGHT SWITCH LAMP
PART NO. ZB7200-1X



COLORLIGHT ELECTRIC SWITCH
LAMP SIGNAL ASSEMBLY
7200-1X

ITEM	QTY	PART Nº	DESCRIPTION
1	1	7001	PEDESTAL
2	1	7201-1	COVER
3	1	7202	BASE
4	2	1019-1	LENS MOUNTING RING
5	2	1028	4" GREEN LENS
6	2	1029	4" YELLOW LENS
7	2	7204	SHIELD
8	1		TERMINALS, 4 GANG (AAR)
9	6		6-32 X 1/4" SCREW
10	2		3/8"-16 X 5" BOLT, HEX HEAD
11	2		3/8" HEX NUT
12	2		3/8" FLATWASHER
13	2		3/8" LOCKWASHER

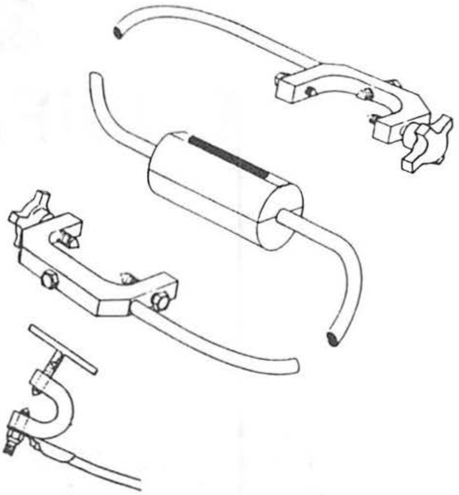
L & W INDUSTRIES

TOOLS
&
EQUIPMENT

TEST SHUNTS
TERMINAL WRENCHES
RELAY SHIPPING CARTONS
PLAN HOLDERS
CRIMPING TOOLS & WIRE STRIPPERS
LUBRICANTS & CONTACT SPRAYS
SWITCH ADJUSTMENT WRENCHES
BONDING DRILLS & BONDING BITS
JOINT BOND WELDERS & MOLDS
DUCT SEAL
ELECTRICAL TAPE
PADLOCKS

TEST SHUNTS

TEST SHUNT O.O6 OHM:



TEST SHUNT 0.06 OHM, WITH TOP OF
RAIL CONNECTIONS.
PART NO. CA2900-X

TEST SHUNT 0.06 OHM, WITH BOTTOM
OF RAIL CONNECTIONS.
PART NO. CA2903-X

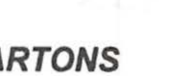
TEST SHUNT HARD WIRED:

TEST SHUNT HARD WIRED, WITH TOP
OF RAIL CONNECTIONS.
PART NO. CA2900-1X

TEST SHUNT HARD WIRED, WITH
BOTTOM OF RAIL CONNECTIONS.
PART NO. CA2903-1X

TERMINAL WRENCHES

TERMINAL WRENCHES:



1/2" DRIVE STANDARD AAR TERMINAL
WRENCH.
PART NO. 1/2" X 4-1/2"L EC32619-1X
1/2" X 6-1/2"L EC32619-3X

B1 STYLE RELAY TEST WRENCH.
PART NO.

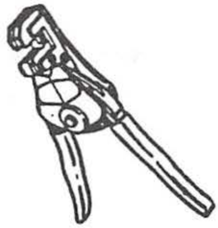
RELAY SHIPPING CARTONS

RELAY SHIPPING CARTONS:

RELAY SHIPPING CARTON FOR (1) EACH
4 POINT OR 6 POINT SHELF STYLE RELAY.
PART NO. EC2505-X

RELAY SHIPPING CARTON FOR (1) EACH
PLUG IN RELAY STYLE B1 OR PN150.
PART NO. EC2505-1X

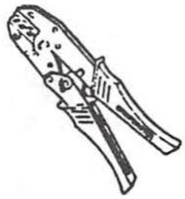
WIRE STRIPPERS



WIRE STRIPPERS:

WIRE STRIPPERS FOR #10 - #22 AWG
WIRE SIZE. WITH REPLACEABLE
WIRE CUTTING BLADES.
PART NO. ZB445-092

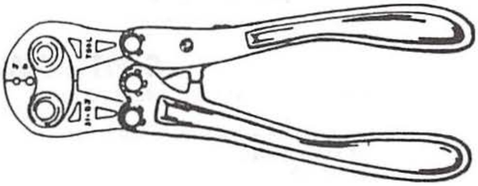
CRIMPING TOOLS



CRIMPING TOOLS:

RATCHET CRIMPING TOOL FOR WIRE
EYELETS SIZE #10 - #16 HEAVY DUTY.
PART NO. 9A59239-4

COMPRESSION CRIMPING TOOL FOR
NICOPRESS SLEEVES WITH GROOVE
"B" AND "A".
PART NO. BA17-BA ✻



COMPRESSION CRIMPING TOOL FOR
NICOPRESS SLEEVES WITH GROOVE
"D" AND "J".
PART NO. BA31-DJ ✻

COMPRESSION CRIMPING TOOL FOR
NICOPRESS SLEEVES WITH GROOVE
"X","P", AND "J".
PART NO. BA53-XPJ

PLAN HOLDERS

PLAN HOLDERS:

PLAN HOLDER TUBE TYPE
PART NO. ZB1746-X

L&W
Industries, Inc
SPRINGFIELD MISSOURI

LUBRICANTS

SWITCH MACHINE GREASE:

SLIP PLATE GRAPHITE

CONTACT SPRAY

CONTACT SPRAY:

GLOBO QUAD-OIL WATER REPELLENT
PENETRATING OIL. 12 OZ. CAN.
PART NO. ZB3002

Globo Quad-Oil eliminates frost or moisture on exposed contacts. Its applications are Gate contacts, Switch machine contacts, Switch motors, and all other Controller contacts. Globo Quad-Oil repels 1200 times its volume in water.

SWITCH WRENCHES

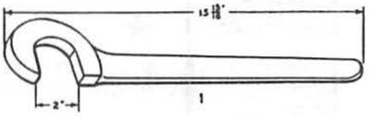
SWITCH ADJUSTMENT WRENCHES:

WRENCH FOR THROW RODS 1 1/2"
15 15/16" LONG.
PART NO.

WRENCH FOR LOCK RODS 1"
15 15/16" LONG.
PART NO.

WRENCH FOR LOCK RODS AND
POINT DETECTOR RODS 3/4"
10 1/4" LONG.
PART NO.

WRENCH FOR DETECTOR RODS 5/8"
10 1/4" LONG.
PART NO.



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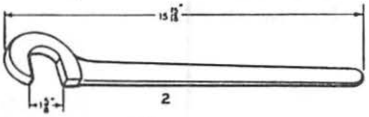

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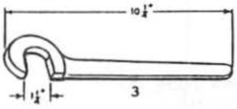

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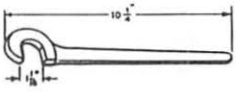
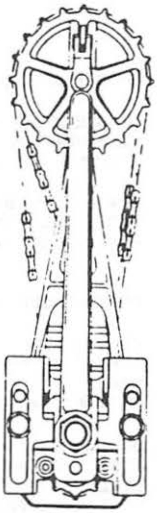


BONDING DRILLS

BONDING DRILL:

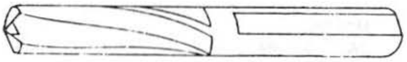


BONDING DRILL BITS

BONDING DRILL BITS:

BONDING DRILL BIT, COBALT
9/32" WITH 9/32" FLAT SHANK.
PART NO. BA2842C

BONDING DRILL BIT, COBALT *
3/8" WITH 3/8" FLAT SHANK.
PART NO. BA2843C

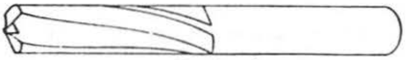


Flat Shank

BONDING DRILL BIT, COBALT
3/8" WITH 9/32" FLAT SHANK.
PART NO. BA2844C

BONDING DRILL BIT, COBALT
9/32" WITH 9/32" ROUND SHANK.
PART NO. BA2852C

BONDING DRILL BIT, COBALT
3/8" WITH 3/8" ROUND SHANK. *
PART NO. BA2853C



Round Shank

BONDING DRILL BIT, COBALT
9/32" WITH 3/8" FLAT SHANK.
PART NO. BA2865C

JOINT BOND WELDERS

SINGLE JOINT BOND WELDERS:

SINGLE JOINT BOND WELDER FOR 3/16"
WIRE BOND, INCLUDING MOLD.
PART NO. BASTWM9

SINGLE JOINT BOND WELDER FOR 5/16"
WIRE BOND, INCLUDING MOLD.
PART NO. BASTWM17

DOUBLE JOINT BOND WELDERS FOR 3/16" WIRE BOND:

DOUBLE JOINT BOND WELDER FOR
3/16" X 6 1/2" WIRE BOND. INCLUDING
MOLDS.
PART NO. BATWM9X6

DOUBLE JOINT BOND WELDER FOR
3/16" X 7 1/2" WIRE BOND. INCLUDING
MOLDS.
PART NO. BATWM9X7

DOUBLE JOINT BOND WELDER FOR
3/16" X 9 3/4" WIRE BOND. INCLUDING
MOLDS.
PART NO. BATWM9X9

DOUBLE JOINT BOND WELDERS FOR 5/16" WIRE BOND:

DOUBLE JOINT BOND WELDER FOR
5/16" X 7" WIRE BOND. INCLUDING
MOLDS.
PART NO. BATWM17X7

DOUBLE JOINT BOND WELDER FOR
5/16" X 9 3/4" WIRE BOND. INCLUDING
MOLDS.
PART NO. BATWM17X9

REPLACEMENT MOLDS ONLY

REPLACEMENT MOLDS:

REPLACEMENT MOLD FOR 3/16" BOND
PART NO. BAM9-1

REPLACEMENT MOLD FOR 5/16" BOND
PART NO. BAM17-1

L & W INDUSTRIES

GRS

PRODUCTS

MF DWARF SIGNAL
CLS TYPE D CLS REPLACEMENT PARTS
SWITCH COMPONENTS

GRS CROSS REFERENCE GUIDE

GRS PART NO.	DESCRIPTION,SHORT	L&W PART NO.
A91-170	ROD,POINT DETECTOR 76"INSL	HL996159-000
A91-171	ROD,POINT DETECTOR 80 1/2"	HL996159-001
A91-172	ROD,POINT DETECTOR 84"INSL	HL996159-002
A91-173	ROD,POINT DETECTOR 86 1/2"	HL996159-003
A91-174	ROD,POINT DETECTOR 92 1/2"	HL996159-004
A91-175	ROD,POINT DETECTOR 94"INSL	HL996159-005
A91-176	ROD,POINT DETECTOR 93"INSL	HL996159-006
A91-181	ROD,SWITCH CIRCUIT CTRL 90"	HL996158-000
A91-182	ROD,SWITCH CIRCUIT CTRL 124	HL996158-001
A91-190	ROD,SWITCH CIRCUIT CTRL 34"	HL996125-000
A91-191	ROD,SWITCH CIRCUIT CTRL 40"	HL996125-001
A91-192	ROD,SWITCH CIRCUIT CTRL 46"	HL996125-002
A91-200	POINT LUG,TAPERED 15 3/4"	HL996179-000
A91-201	POINT LUG,TAPERED 18 1/2"	HL996179-001
A91-202	POINT LUG,TAPERED 21 1/4"	HL996179-002
A91-203	POINT LUG,TAPERED 24 1/4"	HL996179-003
A91-207	POINT LUG,TAPERED 15 3/4"	HL996014-000
A91-208	POINT LUG,TAPERED 18 1/2"	HL996014-001
A91-209	POINT LUG,TAPERED 21 1/4"	HL996014-002
A91-210	POINT LUG,TAPERED 24 1/4"	HL996014-003
A91-215	SCREW JAW W/HARDWARE	HL031141-000
A91-220	INSULATION KIT	HL031188-000
A91-243	FRONT ROD,HINGED INSL	HL996978-008
A91-343	FRONT ROD,HINGED INSL	HL996971-008
A91-361	FRONT ROD,HINGED INSL	HL996971-004
A91-363	FRONT ROD,HINGED INSL	HL996970-008
A91-383	FRONT ROD,HINGED INSL	HL996979-008
A91-390	FRONT ROD,HINGED INSL	HL996978-001
A91-391	FRONT ROD,HINGED INSL	HL996978-003
A91-430	FRONT ROD,HINGED INSL	HL996976-001
A91-431	FRONT ROD,HINGED INSL	HL996976-003
A91-450	POINT LUG,TAPERED 17 1/8"	HL996179-004
A91-451	POINT LUG,TAPERED 19 7/8"	HL996179-005
A91-452	POINT LUG,TAPERED 22 3/4"	HL996179-006
A91-453	POINT LUG TAPERED 20 1/2"	HL996179-007
A91-460	POINT LUG,TAPERED 17 1/8"	HL996014-004
A91-461	POINT LUG,TAPERED 19 7/8"	HL996014-005
A91-462	POINT LUG,TAPERED 22 3/4"	HL996014-006
A91-463	POINT LUG,TAPERED 20 1/2"	HL996014-007
P62-402	WASHER,INTERNAL LOCK	
P63-105	NUT 1"- 8 HEAVY HEX	
P65-182	WASHER,RUBBER	
P65-183	GASKET	
P65-247	GASKET	
P65-250	GASKET	
P65-252	GASKET	
P65-253	GASKET	
P65-261	GASKET	
P65-585	NUT,HEX AAR	
P71-103	COTTER PIN 1/5" X 4 1/2"	

GRS CROSS REFERENCE GUIDE

GRS PART NO.	DESCRIPTION,SHORT	L&W PART NO.
P85-382	OILER BOTTOM FITTING	HL991110-000
P85-383	OILER TOP FITTING	HL991118-000
P85-405	WRENCH	HL061125-000
P85-406	WRENCH	HL061131-000
P85-407	WRENCH	HL061130-000
P85-408	WRENCH	HL061124-000
P85-424	BOLT, 3 1/2" LONG	
P85-449	CONNECTOR COMPLETE	
P85-468	ROD,LOCK ADJUSTABLE	HL996117-000
P85-469	ROD,LOCK RIGHT HAND	HL996086-000
P85-470	BAR,STRAIGHT	HL051054-000
P85-471	ROD,STRAIGHT	HL051036-000
P85-482	PLATE,ADUSTING LOCK ROD	HL071109-000
P85-483	PLATE,ADJUSTING	HL071879-000
P85-495	GEAR 80 TOOTH	HL001118-001
P85-496	GEAR 84 TOOTH	HL001118-002
P85-498	GEAR 79 TOOTH	HL001110-001
P85-499	GEAR 74 TOOTH	HL001110-002
P85-500	GEAR,COMPLETE ASSEMBLY	HL996097-000
P85-507	PINION	HL104118-000
P85-508	PINION 11 TOOTH	HL104110-000
P85-517	CLUTCH DISC	HL108111-000
P85-522	SHAFT	HL071110-000
P85-523	SHAFT	HL071112-000
P85-552	NUT.HEX SLOTTED 7/8"-9	
P85-560	LUG,DROP 3 1/2", 1" ROD	HL051178-000
P85-561	LUG,DROP 2 1/2", 1" ROD	HL051014-000
P85-562	LUG,SWIVEL DROP 3 1/2'	HL051121-000
P85-563	LUG,DROP 2 1/2", 3/4" ROD	HL051196-000
P85-595	GUARD,THROW ROD	HL090117-000
P85-596	GUARD,THROW ROD	HL090182-000
P85-606	PINION 16 TOOTH	HL104117-002
P85-607	PINION 12 TOOTH	HL104117-003
P85-608	PINION 14 TOOTH	HL104114-000
P85-609	PINION 19 TOOTH	HL104114-001
P85-709	COUPLER,THROW BAR	HL001112-001
P85-729	ROD,ADJUSTING	HL071100-000
P85-730	ROD,ADJUSTING	HL051053-000
P85-735	CLIP,LOCK ROD	HL071053-000
P85-737	GUARD,LEFT HAND	HL090116-000
P85-738	GUARD,RIGHT HAND	HL090106-000
P85-764	ROD,POINT DETECTOR	HL996118-000
P85-765	ROD,POINT DETECTOR	HL996045-000
P85-799	STUD, COMPLETE	
P85-810	CLIP	HL090110-000
P85-839	GEAR	HL104111-000
P85-840	GEAR,25 TOOTH	HL104116-000
P85-862	WEAR PLATE	HL090118-000
P85-863	WEAR PLATE	HL090118-001
P85-864	WEAR PLATE ASSY.KIT	HL031196-000
P85-865	WEAR PLATE ASSY.KIT	HL031193-000
P85-878	TERMINAL BLOCK 1 X 10 POST	9A2230-10X

GRS CROSS REFERENCE GUIDE

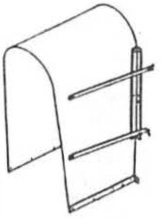
GRS PART NO.	DESCRIPTION,SHORT	L&W PART NO.
P85-881	ROD,WITH STUD	HL071101-000
P85-883	ROD,WITH STUD	HL051052-000
P85-925	COUPLING,THROW ROD OFFSET	HL001194-001
P85-931	SCREW	
P87-108	SCREW	
P91-100	PIN,CONNECTOR 7/8" X 21/4"	HL996124-000
P91-101	PIN,CONNECTOR ONLY	HL071020-000
P91-102	PIN,CONNECTOR 1 1/4" X 5 "	HL996007-000
P91-103	WEDGE RING	HL071197-000
P91-110	SCREW JAW	HL001195-000
P91-111	NUT,HEAVY HEX 1 1/4"-7	
P91-112	RIVET,ROUND HEAD 1/4"X1 11/16"	
P91-120	BOLT,CONNECTING 7/8"-9 X 2 3/4"	HL996015-000
P91-121	BOLT,CONNECTING ONLY W/NUT	HL071967-000
P91-122	NUT,CUPPED HEAVY HEX 1 1/4"	HL071126-000
P91-123	NUT,HEAVY HEX JAM 1 1/4"-7	
P91-124	NUT,HEAVY HEX 1 1/4"-7	
P91-140	BOLT,CONNECTING	HL996085-000
P91-142	WASHER	
P91-143	SPRING	HL105118-000
P91-144	NUT HEAVY HEX JAM 1"-8	
P91-145	WASHER PLATE 2 HOLE 1"	HL061148-000
P91-146	WASHER PLATE 2 HOLE 3/4"	HL061147-000
P91-160	BOLT,SWITCH POINT 3/4"X3 1/2"	
P91-161	BOLT,SWITCH POINT 3/4"X4"	
P91-162	BOLT,SWITCH POINT 3/4"X4 1/2"	
P91-163	BOLT,SWITCH POINT 3/4"X5"	
P91-164	BOLT,SWITCH POINT 3/4"X5 1/2"	
P91-170	BOLT,SWITCH POINT 3/4"X3 1/2"	
P91-171	BOLT,SWITCH POINT 3/4"X4"	
P91-172	BOLT,SWITCH POINT 3/4"X4 1/2"	
P91-173	BOLT,SWITCH POINT 3/4"X5"	
P91-174	BOLT,SWITCH POINT 3/4"X5 1/2"	
P91-181	BOLT,SWITCH POINT 3/4"X4"	
P91-182	BOLT,SWITCH POINT 3/4"X4 1/2"	
P91-183	BOLT,SWITCH POINT 3/4"X5"	
P91-184	BOLT,SWITCH POINT 3/4"X5 1/2"	
P91-190	BOLT,SWITCH POINT 1"X3 1/2"	
P91-191	BOLT,SWITCH POINT 1"X4"	
P91-192	BOLT,SWITCH POINT 1"X4 1/2"	
P91-193	BOLT,SWITCH POINT 1"X5"	
P91-194	BOLT,SWITCH POINT 1"X5 1/2"	
P91-200	BOLT,SWITCH POINT 1"X3 1/2"	
P91-201	BOLT,SWITCH POINT 1"X4"	
P91-202	BOLT,SWITCH POINT 1"X4 1/2"	
P91-203	BOLT,SWITCH POINT 1"X5"	
P91-204	BOLT,SWITCH POINT 1"X5 1/2"	
P91-210	BOLT,SWITCH POINT 1"X3 1/2"	
P91-211	BOLT,SWITCH POINT 1"X4"	
P91-212	BOLT,SWITCH POINT 1"X4 1/2"	
P91-213	BOLT,SWITCH POINT 1"X5'	
P91-214	BOLT,SWITCH POINT 1"X5 1/2"	

GRS CROSS REFERENCE GUIDE

GRS PART NO.	DESCRIPTION,SHORT	L&W PART NO.
P91-221	NUT,SQUARE HEAVY 3/4-10	
P91-222	NUT,HEAVY HEX SLOTTED 3/4-10	
P91-227	NUT,HEAVY SQUARE 1-8	
P91-228	NUT,HEAVY HEX SLOTTED 1-8	
P91-230	WASHER,LOCK 1 1/4"	
P91-246	BOLT,SQUARE HD 3/4"-2 1/2"	
P91-270	BUSHING,FRONT ROD BOLT 3/4"	HL051128-000
P91-273	TRANSIT BAR 1" X 36",FRNT RD.	HL071883-000
P91-279	LUG,SWIVEL LEFT HAND 13 1/8	HL991192-011
P91-282	LUG,SWIVEL RT.HAND 13 1/8"	HL991102-011
P91-283	LUG,SWIVEL RT.HAND 15 1/8"	HL991102-111
P91-284	LUG,SWIVEL RT.HAND 13 1/8"	HL991102-1110
P91-290	LUG,CENTER OFFSET 2 5/8"	HL001176-001
P91-312	PLATE,CONNECTOR 1/2"	HL061141-000
P91-313	PLATE,CONNECTOR 1/4"	HL061142-000
P91-316	ADJUSTMENT BASKET HOUSING	HL001187-001
P91-328	BUSHING,INSULATOR 1" BAR	HL102190-001
P91-329	PLATE,INSULATOR 1/8",4 HOLE	HL102191-000
P91-338	WASHER,LOCK 1"	
P91-144	NUY,HEX JAM 1"-8	

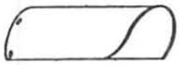
TYPE "D" COLORLIGHT PARTS

BACKGROUND AND HOODS:



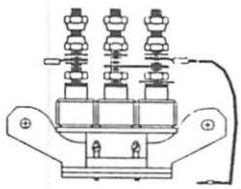
BACKGROUND AND SNOW SHIELD ASSEMBLY
FOR 3 POSITION TYPE"D" COLORLIGHT.
COMPLETE WITH ALL MOUNTING HARDWARE.
PART NO. 5Z996181-000

BACKGROUND AND SNOW SHIELD ASSEMBLY
FOR 2 POSITION TYPE "D" COLORLIGHT.
COMPLETE WITH ALL MOUNTING HARDWARE.
PART NO. 5Z996096-000



HOOD FOR TYPE "D" SIGNAL .
PART NO. 5Z4715

LAMP BRACKETS:

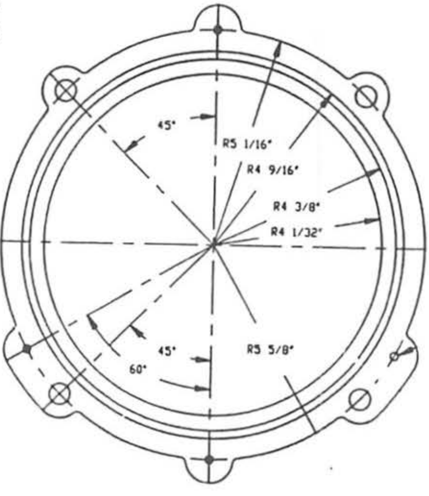


LAMP BRACKET ASSEMBLY FOR TYPE "D"
SIGNAL.
PART NO. 5Z4655-X

FACTORY PRE-FOCUSED.
PART NO. 5Z4655-1XF

ADAPTER RINGS:

ADAPTER RING TO CONVERT TYPE "D"
DOUBLET LENS ASSEMBLY TO A REAR
REMOVABLE ASSEMBLY.
PART NO. 5Z4497

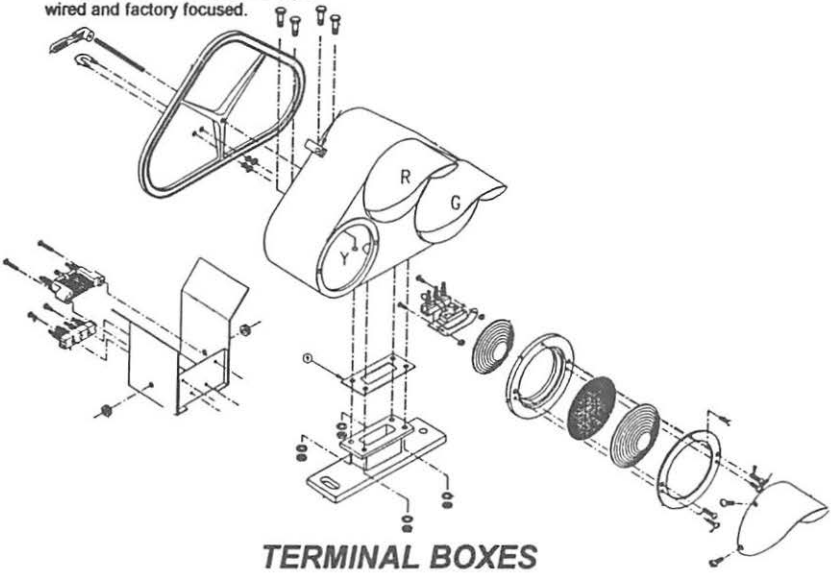


MF DWARF SIGNAL

MF DWARF SIGNAL ASSEMBLY:

MF DWARF SIGNAL ASSEMBLY
COMPLETE. PRE-FOCUSED
PART NO. 5B4900-X

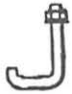
MF Dwarf Signals are fully assembled with 10 volt 18 watt signal bulb, pre-wired and factory focused.



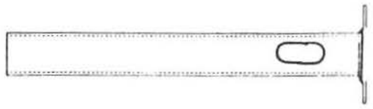
TERMINAL BOXES

TERMINAL BOX REPLACEMENT PARTS:

HOOK BOLT FOR GRS TERMINAL BOX
PART NO. P81-127



PEDESTAL, GALVANIZED STEEL FOR GRS TERMINAL BOX 3 1/2" O.D. X 30 1/4" TALL. WITH SIDE CABLE ENTRANCE SLOT.
PART NO. 3P7110-1



US & S

PRODUCTS

PRODUCT X-REFERENCE GUIDE
R2, P5, TP5 CLS PARTS
N2 DWARF CLS PARTS
H2 SEARCHLIGHT SIGNALS PARTS
HEXAGON CROSSING GATEARMS
HC FLASHING LIGHT SIGNAL PARTS

U.S& S. CROSS REFERENCE GUIDE

USS PART NO.	DESCRIPTION,SHORT	L&W PART NO.
A047767	WIRE,.052"STAINLESS 1'3"	DA-20
J032798	FITTING,ELL COMPRESSION,KIT	DA-50
J032922	PROTECTOR,1/2"INT.PIPE THD	DA-52
J039128	FITTING 1/8"P.T.F.LUB.RELIEF	DA-49
J039137	FITTING,1/8"P.T.STRAIGHT LUB.	DA-47
J047766	WASHER,1/4"STEEL LOCK XHVY	DA-24
J047767	WASHER,5/16"STL LOCK XHVY	DA-22
J047769	WASHER,1/2"STEEL LOCK XHVY	DA-15
J048636	COTTER,3/16"X2"STEEL,KIT	DA-06
J050025	SCREW,1/2X4 1/2 HEX STL,KIT	DA-16
J050105	SCREW,1/2X3 1/2 HEX STL,KIT	DA-17
J067436	PACKING,U-CUP,2EA/KIT	DA-46
J067123	RING,11/16X7/8"O",2EA/KIT	DA-13
J067130	RING,5/8X13/16"O",8EA/KIT	DA-12
J067421	PACKING,KIT	DA-05
J067427	RING,1X1 1/4"O",KIT	DA-04
J068203	SPRING,VALVE,2EA/KIT	DA-35
J337129	VALVE,PILOTAIR	DA-18
J480160	NUT,1"-14 HEX SLOTTED STEEL	DA-07
J7233192	RETAINER,V-RING,2EA/KIT	DA-45
J791577	RING,RETAINER	DA-44
J791578	RING,SQUARE RETAINING,KIT	DA-34
J791579	WIPER	DA-02
J792183	RING,RETAINER	DA-01
M001091	BUSHING	DA-37
M001509	NUT,2EA/KIT	DA-26
M001707	ARMATURE,MAGNET,2EA/KIT	DA-27
M003100	VALVE,PIN,2EA/KIT	DA-33
M106286	FOLLOWER,PISTON	DA-40
M323630	CAP,MAGNET,2EA/KIT	DA-25
M371967	FOLLOWER,PISTON	DA-41
M371968	FOLLOWER,PISTON	DA-38
M371969	CYLINDER	DA-43
M371971	CHAMBER,VALVE	DA-09
M371980	EYE,SCREW,STRAIGHT	DA-53
M371985	SPACER,PISTON NUT	DA-39
M371990	RING,PACKING BACK-UP KIT	DA-03
M371998	GASKET,CYLINDER HEAD	DA-08
M371999	NUT,MAGNETIZED LOCK,KIT	DA-30
M372007	PLUG,EXHAUST,2EA/KIT	DA-19
M372014	VALVE,ARMATURE,2EA/KIT	DA-31
M372015	STEM,ARMATURE,2EA/KIT	DA-29
M372024	SEAT,VALVE,2EA/KIT	DA-32
M372046	COUPLING,VALVE 3EA/KIT	DA-10
M372047	CONNECTOR,VALVE,KIT	DA-11
M372069	TUBING,COPPER,2EA/KIT	DA-51
M372211	SCREW,1/4X2 1/2	DA-23
M372212	SCREW,5/16X2 1/2	DA-21
N371979	EYE,SCREW	DA-48
N371987	ROD,PISTON	DA-42
N371989	NUT,VALVE CAP,2EA/KIT	DA-36
N371995	MAGNET,130 OHM,2EA/KIT	DA-28

U.S& S. CROSS REFERENCE GUIDE

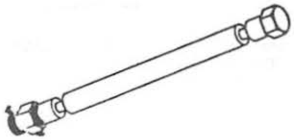
USS PART NO.	DESCRIPTION,SHORT	L&W PART NO.
UJ-000327	CLEVIS PIN	HL996071-000
UJ-003755	SCREW JAW	HL071893-000
UJ-046000	COTTER PIN 5/32" X 1 1/2"	
UJ-047547	WASHER,LOCK	
UJ-047927	RUBBER BUSHING	HL103103-000
UJ-048136	NUT,HEX SLOTTED	
UM-003755	SCREW JAW 1"-8 WITH 5/8"HOLE	HL001172-001
UM-010725	BOLT,SQUARE HD.3/4"-10 X 2 3/4"	HL071099-000
UM-022398	SCREW JAW 1 1/4"	HL001195-003
UM-022584	CRANK STAND PLATE	HL061018-000
UM-108315	ROLLER,RECESSED	HL071157-000
UM-117153	NUT,HEX CUPPED	HL071997-000
UM-117198	WASHER	
UM-118861	ROD,LOCK	HL051149-000
UM-118862	ROD,LOCK RIGHT HAND	HL051178-000
UM-118863	ROD,LOCK LEFT HAND	HL051147-000
UM-118864	ROD,LOCK ADJUSTABLE RH	HL996135-000
UM-118865	ROD,LOCK ADJUSTABLE LH	HL996134-000
UM-142168	ROD POINT DETECTOR M23	HL071138-000
UM-148141	GUARD, BAR COVER	HL090116-000
UM-149864	BAR	HL051192-000
UM-149865	BAR	HL051181-000
UM-159272	GUARD,COVER	HL090114-000
UM-162983	MOUNTING BRACKET H2 SIGNAL	
UM-165751	COVER PLATE	
UM-178531	CAM ASSEMBLY U5	HL996116-000
UM-180172	CAM,SEGMENT PLATED PART	HL001111-002
UM-180472	BOLT,SCREW JAW	HL071070-000
UM-182552	NUT,HEAVY HEX CUPPED 1 1/4"-7	HL071126-000
UM-189024	WEAR BRACKET	HL001113-001
UM-195331	BUSHING A-5	HL996164-000
UM-208570	NUT,ADJUSTING	HL071982-000
UM-208590	WEAR BRACKET	HL071051-000
UM-208597	NUT,ADJUSTING	HL071983-000
UM-239322	SPRING,SHORT	
UM-253753	SPRING,LONG	
UM-258668	BAR,FOR UN-258643	HL071125-000
UM-260383	TERMINAL BOARD SL-25/26 LOCK	
UM-270414	BUSHING	HL996168-000
UM-284423	ROLLER	HL071142-000
UM-284851	PIN	HL071131-000
UM-284472	ROD,POINT DETECTOR SHORT	HL071138-001
UM-285410	BUSHING ASSEMBLY A-5	HL996176-000
UM-285486	ROLLER ASSEMBLY	HL996185-000
UM-285866	ROLLER ASSEMBLY	
UM-285906	BAR,POINT DETECTOR M23	HL071051-000
UM-296066	COVER PLATE	HL090100-000
UM-296971	WASHER,FLAT	
UM-296977	WASHER,FLAT	
UM-332332	ROD,OPERATING CONNECT RH	HL996064-001
UM-335592	ROD,OPERATING CONNECT LH	HL996064-000
UM-345373	LUG,SWITCH POINT 115# LH	HL071977-000

U.S& S. CROSS REFERENCE GUIDE

USS PART NO.	DESCRIPTION,SHORT	L&W PART NO.
UM-345374	LUG,SWITCH POINT 136# LH	HL071976-000
UM-345376	LUG,SWITCH POINT 115# RH	HL071977-001
UM-345378	LUG,SWITCH POINT 136# RH	HL071976-001
UN-055305	TRUNNION	HL996162-000
UN-074737	ROLLER STRAIGHT	HL071156-000
UN-078626	SCREW JAW 1 1/4"	HL001195-002
UN-103713	CABLE OUTLET KIT	
UN-113767	ROD,LOCK LEFT HAND	HL996072-000
UN-119749	ROD,LOCK RH OR LH	HL996048-000
UN-119750	ROD,LOCK RIGHT HAND	HL996049-000
UN-139665	WIRE GUIDE PLATE	HL090169-000
UN-141759	BAR,POINT DETECTOR LONG	HL996119-000
UN-142169	SLEEVE,POINT DETECTOR LONG	HL071040-000
UN-149866	ROD,LOCK	HL996188-000
UN-158981	ROD,LOCK RIGHT	
UN-158982	ROD,LOCK LEFT	
UN-158984	ROD,LOCK LEFT HAND	HL996061-000
UN-191236	LATCH STAND ASSEMBLY	HL996147-000
UN-194419	OFFSET BRACKET	
UN-208591	BAR,POINT DETECTOR	HL996141-001
UN-211449	BALL STUD	
UN-212703	SOCKET	HL001103-001
UN-212708	SOCKET ASSEMBLY	HL991113-001
UN-229473	ROD,THROW 72"	HL996156-001
UN-242441	GUARD,COVER	HL090112-000
UN-258643	ROD,LOCK ADJUSTABLE	HL996180-000
UN-269671	GUARD,COVER	HL090101-000
UN-284474	SLEEVE,POINT DETECTOR SHRT	HL071040-001
UN-284475	BAR,POINT DETECTOR SHORT	HL996119-001
UN-285410	TRUNNION	HL996176-000
UN-285906	SHAFT,POINT DETECTOR BAR	HL071167-000
UN-285907	BAR,POINT DETECTOR	HL996189-000
UN-296122	BUSHING,POINT DETECTOR	HL996111-000
UN-296125	GUARD,COVER	HL090109-000
UN-296126	GUARD,BAR COVER	HL090108-000
UN-297460	LUG,POINT DETECTOR 1" BOLTS	HL996096-001
UN-299473	ROD,OPERATING 82"LONG	HL996156-000
UN-303537	CRANK AND STAND ASSEMBLY	
UN-314901	CRANK AND STAND ASSEMBLY	
UN-321508	ROD,CONTROLLER OPERATING	HL996155-000
UN-329977	LOCK ASSEMBLY LEVER	HL996103-000
UN-330379	BAR,POINT DETECTOR	HL996070-000
UN-331098	ROD,MID POINT HELPER	HL996051-000
UN-332099	CRANK AND STAND ASSEMBLY	
UN-345779	LUG,POINT DETECTOR 1" BOLTS	HL996169-101
UN-384115	ROD,SOLID JAW	HL996053-000
UN-375150	LUG,POINT DETECTOR 3/4"BOLT	HL996169-102
UN-376403	ROD,CONTROLLER OPERATING	HL996140-000
UN-398631	LUG,POINT DETECTOR 1"BOLTS	HL996169-103
UN-432689	LUG,POINT DETECTOR 1"BOLTS	HL996169-104
UN-434215	LUG,POINT DETECTOR 1"BOLTS	HL996169-000
UN-434217	LUG,POINT DETECTOR 3/4"BOLT	HL996169-001

HEXAGON CROSSING GATE ARMS

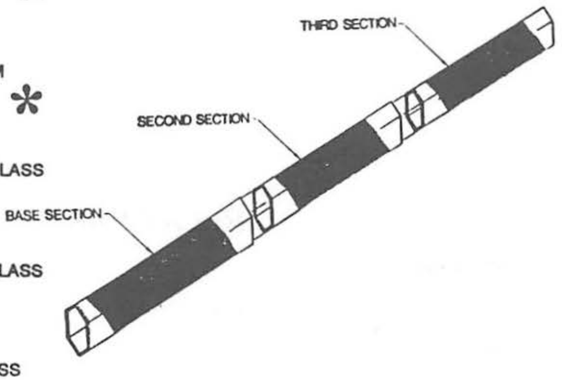
SHEAR PIN ASSEMBLIES:



SHEAR PIN FOR MOUNTING 16' TO 32'
CROSSING GATEARMS. 3/8" DIAMETER
ALUMINUM, WITH COTTER PIN.
PART NO. 6R1571-X

SHEAR PIN FOR MOUNTING 32' TO 46'
CROSSING GATEARMS. 3/8" DIAMETER
ALUMINUM, WITH COTTER PIN.
PART NO. 6R1572-X

REPLACEMENT HEXAGON GATEARM SECTIONS:



FIRST SECTION 16' ALUMINUM *
WITH ENGINEERING GRADE
REFLECTIVE TAPE.
PART NO. 6M1633-RS

FIRST SECTION 16' ALUMINUM
WITH ENGINEERING GRADE *
REFLECTIVE TAPE.
PART NO. 6M1633-HS

SECOND SECTION 16' FIBERGLASS
WITH ENGINEERING GRADE
REFLECTIVE TAPE.
PART NO. 6M1634-RS *

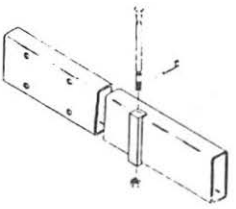
SECOND SECTION 16' FIBERGLASS
WITH HI-INTENSITY GRADE
REFLECTIVE TAPE.
PART NO. 6M1634-HS

THIRD SECTION 16' FIBERGLASS
WITH ENGINEERING GRADE
REFLECTIVE TAPE.
PART NO. 6M1638-RS

THIRD SECTION 16' FIBERGLASS
WITH HI-INTENSITY GRADE
REFLECTIVE TAPE.
PART NO. 6M1638-HS

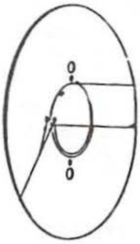
BREAKAWAY SLEEVE:

BREAKAWAY SLEEVE FOR MOUNTING
STANDARD RECTANGULAR GATEARMS
TO U.S. & S. TYPE CONVERSION BRACKET. *
PART NO. 1576-X



HC FLASHING LIGHT SIGNAL PARTS

BACKGROUNDS AND HOODS:



BACKGROUND 8", FOR HC FLASHING
LIGHT SIGNAL UNIT.
PART NO. 6B5029

RELAY PARTS

RELAY PARTS:

RELAY WALL MOUNTING BRACKET
FOR 6 POINT DN STYLE RELAY.
PART NO. 2359-X

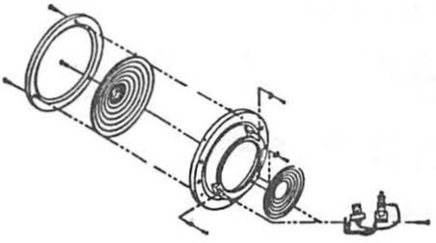
RELAY WALL MOUNTING BRACKET
FOR 2 POINT DN STYLE RELAY.
PART NO. 2357-X

RELAY GASKET FOR 4 POINT DN
STYLE RELAY GLASS.
PART NO. EC2807M

RELAY GASKET FOR H, AND H2
SEARCH LIGHT SIGNAL RELAY
GLASS.
PART NO. EC2806M

R2,P5 AND TP5 COLORLIGHT SIGNAL PARTS

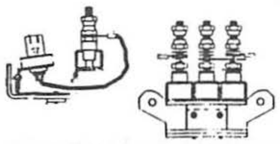
DOUBLET LENS ASSEMBLIES:



DOUBLET LENS ASSEMBLY FOR R2,
P5 AND TP5 COLORLIGHT SIGNALS.
WITH 10 VOLT 18 WATT BULB.
FACTORY PRE-FOCUSED.
PART NO. 5Z4535-7X

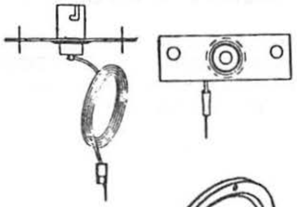
Please specify lens color.

LAMP BRACKET ASSEMBLIES:



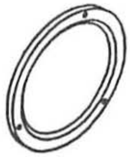
LAMP BRACKET ASSEMBLY FOR R2,
P5 AND TP5 COLORLIGHT SIGNALS.
PART NO. 5Z4669-X

FACTORY PRE-FOCUSED
PART NO. 5Z4669-XF



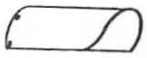
LAMP BRACKET ADAPTER ASSEMBLY.
FOR ADAPTING CERAMIC RE-BASED
BULB BRACKETS TO S-11 BAYONET
BASE BULB SOCKETS.
PART NO. 5Z4674-1X

RETAINING RINGS:



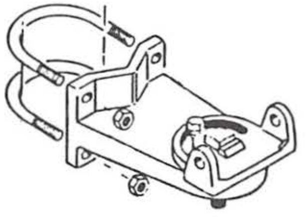
RETAINING RING FOR R2, P5 AND TP5
DOUBLET ASSEMBLIES. CAST ALUMINUM
WITH GASKET SEAL.
PART NO. 5Z4552-1

HOODS:



HOOD FOR U.S. & S. COLORLIGHTS
TYPE R2, P5, AND TP5.
PART NO. 5Z4541

MOUNTING BRACKETS:



MOUNTING BRACKET 5" MAST CAST IRON
FOR ALL U.S. & S. STEEL COLORLIGHTS.
PART NO.

N2 DWARF SIGNAL PARTS

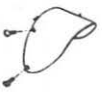
LAMP BRACKETS:

LAMP BRACKET ASSEMBLY FOR N2
DWARF SIGNAL.
PART NO.

FACTORY PRE-FOCUSED
PART NO.

HOODS:

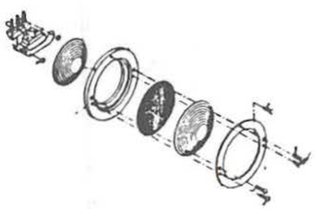
HOOD FOR N2 DWARF SIGNAL
PART NO.



DOUBLET LENS ASSEMBLIES:

DOUBLET LENS ASSEMBLY FOR N2
DWARF SIGNAL. FACTORY FOCUSED,
WITH 10 VOLT 18 WATT SIGNAL BULB.
PART NO. 5Z4630-7X

Please specify lens color.



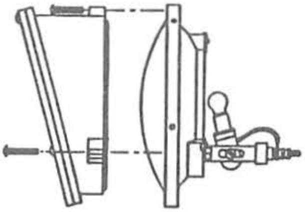
H2 SEARCHLIGHT SIGNAL PARTS

BACKGROUND AND HOODS:

BACKGROUND 36" FOR H2 SIGNAL
WITH SUPPORT BRACE ASSEMBLY.
PART NO. 5S4717-X

PHANKILL ASSEMBLIES

PHANKILL ASSEMBLIES:

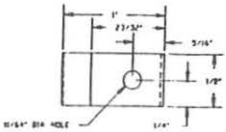


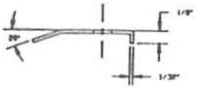
PHANKILL ASSEMBLY, HONEYCOMB
FOR ALL SEARCHLIGHTS, AND
COLORLIGHTS U.S & S.
PART NO.

PHANKILL ASSEMBLY, HONEYCOMB
FOR ALL DWARF SIGNALS U.S. & S.
PART NO.

LENS CLIP

LENS CLIP FOR INNER DOUBLET LENS.
FITS ALL U.S. & S. COLORLIGHT AND
DWARF SIGNALS.
PART NO. 5Z4538


1"
23/32"
5/16"
1/2"
11/64" DIA HOLE
1/4"



L & W INDUSTRIES

SAFETRAN

PRODUCTS

PRODUCT X-REFERENCE GUIDE
CLS10 COLORLIGHT PARTS
CLS20 COLORLIGHT PARTS
FLASHING LIGHT SIGNAL PARTS
EM PEDESTAL GATE MECHANISM PARTS
EM PEDESTAL HIGH WIND GUARD
EM PEDESTAL MAST EXTENSION
EM PEDESTAL CONVERSION BRACKETS
S-10 & S-20 GATE MECHANISM PARTS

SAFETRAN CROSS REFERENCE GUIDE

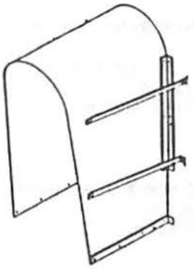
OEM PART NO.	DESCRIPTION,SHORT	L&W PART NO.
023274-23X	TERMINAL BLOCK, 2 X 6 W/HWD	
023274-501	TERMINAL BLOCK, 2 X 2	
023390-502X	TERMINAL BLOCK, 1 X 2 W/HWD	9A2230-2X
023390-503	TERMINAL BLOCK, 1 X 4	
023390-504	TERMINAL BLOCK, 1 X 6	
023390-509	TERMINAL BLOCK, 1 X 3	
023832	NUT, BINDING AAR TERMINAL	9A2204
023834	WASHER, AAR TERMINAL	9A2203
025618-26X	DOUBLE DISCONNECT BLOCK	
025618-9AX	SINGLE DISCONNECT BLOCK	
035004-2X	U' BOLT ASSEMBLY 4" MAST	
035015-A	STAY CLAMP HALF, 5" MAST	
035015-1	STAY CLAMP HALF, 5" MAST	5J7475-X
035045-X	PINNACLE 5" MAST	5L7500-X
035045-502	PINNACLE 4" AND 5" MAST	5L7500-X
041214-1	CONNECTOR FLX 10	
041214-2	CONNECTOR FLX 12	
041220	GASKET, CONNECTOR	
041264-1	SUPPORT CLAMP, THREADED	
041279-19	EXTENSION BRACKET 18 1/2"	
041279-500	EXTENSION BRACKET 9 1/2"	
041279-7	EXTENSION BRACKET 6 1/2"	
041291	GASKET, CROSSARM EXTENSION	
041442-29	PIPE, 4" UPPER DRILLED	
041442-30	SUPPORT BAR, SIDE LIGHT BRKT	
041901-A	BASE, 4" SPLIT PLAIN HALF	NOTE 9 1/2"
041901-AX	BASE, 4" SPLIT PLAIN ALUM.	7D5810-X
041902-A	BASE, 4" JUNCTION BOX HALF	NOTE 11 11/16
041902-AX	BASE, 4" JUNCTION BOX ALUM.	7D5800-X
041902-1AX	BASE, 4" JUNCTION BOX ALUM.	7D5800-X
041902-2AX	BASE, 4" JUNCTION BOX ALUM.	7D5830-X
041902-3AX	BASE, 4" JUNCTION BOX ALUM.	7D5830-X
041903-A	COVER, 4" BASE ALUMINUM	
041905-A	BASE, 4" SPLIT PLAIN HALF	NOTE 11 11/16"
041905-AX	BASE, 4" SPLIT PLAIN ALUM.	7D5710-X
041906-A	BASE, 4" JUNCTION BOX HALF	
041906-AX	BASE, 4" JUNCTION BOX ALUM.	7D5700-X
041906-1AX	BASE, 4" JUNCTION BOX ALUM.	7D5700-X
041906-2AX	BASE, 4" JUNCTION BOX ALUM.	7D5730-X
041906-3AX	BASE, 4" JUNCTION BOX ALUM.	7D5730-X
041907	BASE, 5" SPLIT PLAIN ONLY	
041908	BASE, 5" JUNCTION BOX ONLY	
041909	COVER, 5" JUNCTION BOX	
041907-X	BASE, 5" SPLIT PLAIN IRON	7D5922-XFE
041908-X	BASE, 5" JUNCTION BOX IRON	7D5920-XFE
041908-1X	BASE, 5" JUNCTION BOX IRON	7D5930-XFE
041908-500X	BASE, 5" JUNCTION BOX IRON	7D5920-XFE
041908-501X	BASE, 5" JUNCTION BOX IRON	7D5930-XFE
041931-1X	BASE, 5" JUNCTION BOX ALUM.	7D5930-X
041931-2X	BASE, 5" JUNCTION BOX ALUM.	7D5920-X
041931-4X	BASE, 5" JUNCTION BOX ALUM.	7D5920-X
041931-500X	BASE, 5" JUNCTION BOX	7D5930-X
041933-X	BASE, 5" SPLIT PLAIN ALUM.	7D5922-X

042003-18	CROSSARM, JUNCTION BOX	
042003-545X	CROSSARM 1 WAY 8" LIGHTS	
042003-553X	CROSSARM 2 WAY 8" LIGHTS	
042003-563X	CROSSARM 2 WAY 12" LIGHTS	
042003-570X	CROSSARM 1 WAY 8" LIGHTS	
042003-582X	CROSSARM 2 WAY 12" LIGHTS	6A6210-X
042003-600X	CROSSARM 2 WAY 8" LIGHTS	
042003-604X	CROSSARM 1 WAY 8" LIGHTS	
042003-605X	CROSSARM 1 WAY 12" LIGHTS	
042003-606X	CROSSARM 1 WAY 12" LIGHTS	6A6210-4X
042003-607X	CROSSARM 2 WAY 12" LIGHTS	
042004-9	BACKGROUND FLX 10 LIGHT	6B5025
042004-10	BACKGROUND FLX 12 LIGHT	
042004-27	BACKGROUND FLX 12 LIGHT	
042005-3	HOOD FLX 10 LIGHT	6B5026
042005-80	HOOD FLX12 LIGHT	
042006	COVER, CROSSARM W/GASKET	
042007	BACK CLAMP, ALUMINUM CAST	
042026-3	LENS CLIP	
042027-3	EXTENSION BRACKET 16 5/8"	
042027-4	EXTENSION BRACKET 8 7/16"	
042031-3	GASKET, 8" LENS FLX 10	
042031-4	GASKET, 12" LENS FLX 12	
042041	COVER PLATE, CROSSARM	
042073-X	JUNCTION BOX CROSSARM ASSY	
042073-12X	JUNCTION BOX CROSSARM ASSY	
042074-3X	JUNCTION BOX CROSSARM ASSY	
042074-8X	JUNCTION BOX CROSSARM ASSY	
042365	BULB, 10 VOLT 18 WATT S-11	
042365-3	BULB, 25 VOLT 25 WATT S-11	
042388	REFLECTOR 12" DEEP DISH	
042483-MX	CROSSARM 1 WAY 12" LIGHTS	6A6210-X
042483-PX	CROSSARM 1 WAY 8" LIGHTS	
042483-MX	CROSSARM 2 WAY 12" LIGHTS	6A6215-X
042484-PX	CROSSARM 2 WAY 8" LIGHTS	
061000	LADDER FOUNDATION 8" X 24"	8A7410-X
061001-LPX	LADDER AND PLATFORM ASSY	5J7401-X
061002-LPX	LADDER AND PLATFORM ASSY	5J7402-X
061004-LPX	LADDER AND PLATFORM ASSY	5J7403-X
061001-L	LADDER ONLY, FOR 1 PLATFORM	
061002-L	LADDER ONLY, FOR 2 PLATFORM	
061004-L	LADDER ONLY, FOR 3 PLATFORM	
061008	INTERMEDIATE LADDER STAY	
061008-G	INTERMEDIATE LADDER STAY	
061008-1	INTERMEDIATE LADDER STAY	
061009-G	INTERMEDIATE HANDRAIL	
061010-1G	TOP HANDRAIL	
061011-G	LADDER TOP SUPPORT	
061012-X	BACK PLATFORM, STEEL	
061013-X	FRONT PLATFORM, STEEL	
061060	TOP LADDER STAY	5J7850-RH
061060-1	TOP LADDER STAY	5J7850-LH
061041-LX	LADDER ASSEMBLY SLANTED	5J7850-X
061042-LX	LADDER ASSEMBLY SLANTED	5J7860-X
061043-LX	LADDER ASSEMBLY SLANTED	5J7870-X
070583-500X	COUPLER, BASE FOR GATEARM	

070583-501X	COUPLER, BASE FOR GATEARM	
070755-4	COUNTERWEIGHT 63#, STEEL	
071367-11X	MOUNTING BOLT, SPLIT 8"	
071367-12X	MOUNTING BOLT, SPLIT 10"	
071805-X	NO TURN SIGNAL ASSEMBLY	
071806-X	NO TURN SIGNAL ASSEMBLY	
075950-500X	GATEARM LAMP 4" RIGID	6P1017-X
075950-502X	GATEARM LAMP 7" RIGID	6P1024-X
075952-500X	LENS KIT, 4" (2EA/KIT)	7B1026-X
075952-509X	LENS KIT, 7" (2EA/KIT)	7B1002-X
076203-501X	BREAKAWAY, FABRICATED	6R1573-X
076203-510X	BREAKAWAY, CAST	6R1574-X
076215-X	SHEAR BOLT ASSEMBLY	6R1570-X
076223-5X	SOCKET AND CORD ASSEMBLY	6R1581-X
076225-5X	CONVERSION BRACKET ONLY	6R1588-X
076225-10X	CONVERSION BRACKET ONLY	6R
076227-22X	CONVERSION BRACKET ASSY	6R1620-X
076227-500X	CONVERSION BRACKET ASSY	6R1622-X
076227-501X	CONVERSION BRACKET ONLY	6R1589-X
076227-513X	CONVERSION BRACKET ASSY	6R1621-X
076227-7X	CONVERSION BRACKET ONLY	6R1587-X
085275	ADVANCE WARNING SIGN 36"	
091463-125	CORD GRIP CONNECTOR 3/8"	
10-06-002	GASKET, CORD 3/8"	
10-06-004	GASKET, CORD 3/8"	
104503	GASKET, CORD 7/16"	
131700-103X	ANCHOR BOLT ASSEMBLY 1 1/2"	
131700-108X	ANCHOR BOLT ASSEMBLY 1 1/2"	
151509-4X	BELL, 4" MOUNTING	
5337-MG	2" PIPE PLUG, GALVANIZED	

CLS10 COLORLIGHT PARTS

BACKGROUNDS AND HOODS:



BACKGROUND AND SNOW SHIELD ASSEMBLY
FOR 2 POSITION STYLE CLS10 COLORLIGHT.
PART NO. 5Z996096-000

BACKGROUND AND SNOW SHIELD ASSEMBLY
FOR 3 POSITION STYLE CLS10 COLORLIGHT.
PART NO. 5Z996181-000

LAMP BRACKET ASSEMBLY FOR CLS 10
COLORLIGHT SIGNAL.
PART NO.

CLS 20 COLORLIGHT PARTS

BACKGROUNDS AND HOODS:

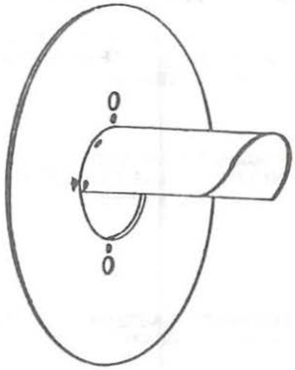
BACKGROUND AND SNOW SHIELD ASSEMBLY
FOR 2 POSITION STYLE CLS20 COLORLIGHT.
PART NO. 5Z996975-000

BACKGROUND AND SNOW SHIELD ASSEMBLY
FOR 3 POSITION STYLE CLS20 COLORLIGHT.
PART NO. 5Z996974-000

LAMP BRACKET ASSEMBLY FOR CLS20
COLORLIGHT SIGNAL.
PART NO. 4669-2X

FLASHING LIGHT SIGNAL PARTS

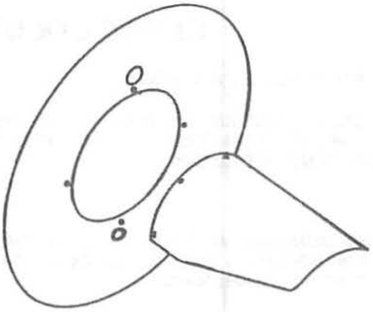
8" SAFETRAN FLX-10 REPLACEMENT PARTS:



BACKGROUND FOR 8" FLASHING LIGHT
ALUMINUM.
PART NO. 6B5026

HOOD FOR 8" FLASHING LIGHT
ALUMINUM.
PART NO. 6B5025

12" SAFETRAN FLX-12 REPLACEMENT PARTS:



BACKGROUND FOR 12" FLASHING LIGHT
ALUMINUM, 20" DIAMETER.
PART NO. 6B5223

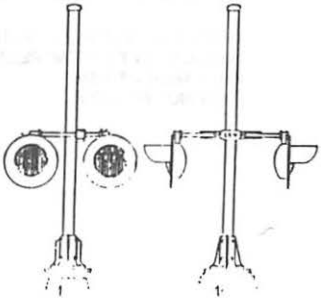
BACKGROUND FOR 12" FLASHING LIGHT
ALUMINUM, 24" DIAMETER
PART NO. 6B5226

HOOD FOR 12" FLASHING LIGHT
ALUMINUM.
PART NO. 6B5224

EM PEDESTAL GATE MECHANISM

FLASHING LIGHT SIGNAL ASSEMBLY:

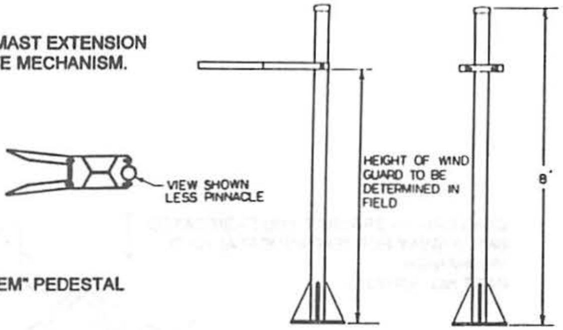
FLASHING LIGHT SIGNAL ASSEMBLY
FOR EM PEDESTAL GATE MECHANISM.
WITH TWO WAY 12" LIGHTS.
PART NO. 6A5290-X



EM Pedestal Gate Flashing Light Signal assembly is shipped with base for mounting on top of the Pedestal Gate, 4" signal pole, Pre-wired Junction Box Crossarm with 12" lights, and pinnacle.

HIGH WIND GUARDS:

HIGH WIND GUARD AND MAST EXTENSION
FOR "EM" PEDESTAL GATE MECHANISM.
PART NO. 6U5544-X

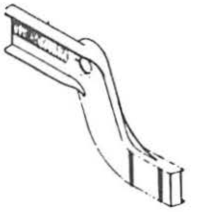


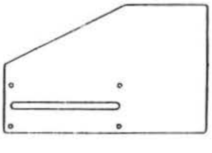
HIGH WIND GUARD FOR "EM" PEDESTAL
GATE MECHANISM.
PART NO. 6U5570-X

COUNTER WEIGHT ARMS AND COUNTER WEIGHTS:

COUNTER WEIGHT ARM, CAST ALUMINUM.

RIGHT HAND PART NO. 6R075402-R
LEFT HAND PART NO. 6R075402-L





COUNTER WEIGHT
PART NO. 6R075407-1

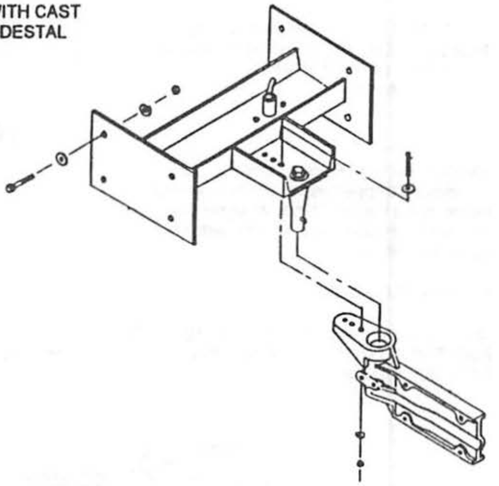
COUNTER WEIGHT MOUNTING STUD

4 3/4"	PART NO. 6R075408-2
7 1/4"	PART NO. 6R075408
9 1/4"	PART NO. 6R075408-1

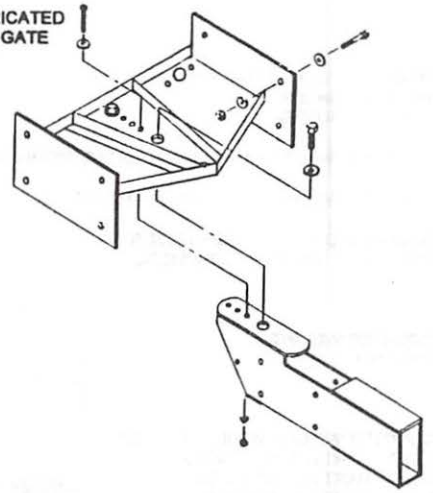
EM PEDESTAL GATE MECHANISM

CONVERSION BRACKET AND BREAKAWAY ASSEMBLIES:

CONVERSION BRACKET WITH CAST
BREAKAWAY FOR "EM" PEDESTAL
GATE MEACHANISM.
PART NO. 6R1622-X



CONVERSION BRACKET AND FABRICATED
BREAKAWAY FOR "EM" PEDESTAL GATE
MECHANISM.
PART NO. 6R1623-X



L & W INDUSTRIES

WESTERN CULLEN PRODUCTS

PRODUCT X-REFERENCE GUIDE
8" & 12" FLASHER PARTS
CROSSING GATEARM PARTS

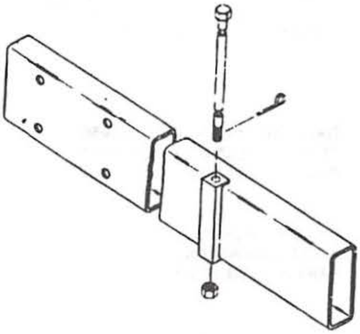
WESTERN CULLEN CROSS REFERENCE GUIDE

WC PART NO.	DESCRIPTION,SHORT	L&W PART NO.
R-5012	MCKEEN BREAKARM	FA15012-X
R-5019	MCKEEN BREAKARM	FA15019-X
R-5016	MCKEEN BREAKARM	FA15016-X
0250-101	MCKEEN TEST SWITCH	
10151	POLE STEP ASSEMBLY 4"	
10152	POLE STEP ASSEMBLY 5"	
1056-2	SLIDE STRAP 1"	9A2215
1056-4	SLIDE STRAP 2 3/8"	
107010	BINDING POST, AAR 1 7/8"	
107010-A	BINDING POST, AAR 1 1/2"	
107010-B	BINDING POST, AAR 2 1/4"	
10706	BINDING NUT, AAR	9A2204
10707	CLAMP NUT, AAR	9A2202
10708	TERMINAL WASHER, AAR	9A2203
10709	BINDING POST, AAR 1 7/8"	
10709-A	BINDING POST, AAR 1 1/2"	
10709-B	BINDING POST, AAR 2 1/4"	
110A-6	PINNACLE 4" MAST	5L7500-X
110A-8	PINNACLE 5" MAST	5L7500-X
1452	BONDING DRILL BIT 9/32"	
1454	BONDING DRILL BIT 3/8"	
1455	BONDING DRILL BIT 3/8"	
1455R	BONDING DRILL BIT 3/8"	
1702-3	CONDUIT ASSEMBLY 1 1/2"	
1702-1A	COVER PLATE GRS CONTROLLER	
1705-1A	COVER PLATE USS CONTROLLER	
1702-12	CONDUIT ASSEMBLY 1 1/2" GRS	
1705-12	CONDUIT ASSEMBLY 1 1/2" USS	
219-5	SOLID STRAP 1"	9A2200
2302-6	FUSE BLOCK ,SINGLE ONLY	
2508-112	TERMINAL BLOCK, 1 X 12 POST	9A2230-X
3364-2	U' BOLT 4" ASSEMBLY	
3364-5	U' BOLT 5" ASSEMBLY	
3364-70	STAINLESS STEEL SIGN MOUNT	7A1000-4 7A1000-5
3366-4	STOP ON RED SIGN 4" MAST	7A1071-X
3368-4A	STOP ON RED SIGN 5" MAST	7A1071-1X
3366-710	STOP ON RED SIGN ONLY	7A1071
3368-710C	TRACK SIGN ONLY	7A1050
3394-711	ADVANCE WARNING SIGN	
37-1016-1	CENTER POST TEST SWITCH	
714-50U-2	MAST, 4" X 15' DRILLED	5L5544
714-50-1	MAST, 4" X 15' DRILLED	5L5543
714-50U-2	MAST, 5" X 15' DRILLED	5L5554
714-50-1	MAST, 5" X 15' DRILLED	5L5553
960-84	JUNCTION BOX CROSSARM 5"	

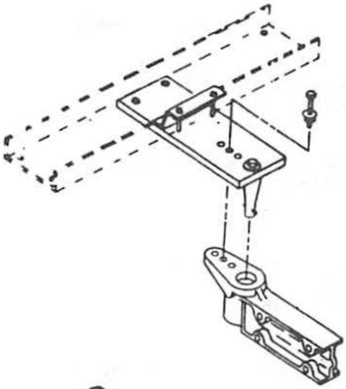
CROSSING GATEARM PARTS

CONVERSION BRACKETS AND BREAKAWAYS:

BREAKAWAY SUPPORT SLEEVE, FOR WESTERN CONVERSION BRACKETS. INCLUDING SHEAR PIN ASSEMBLY.
PART NO. 6R1576-X
*

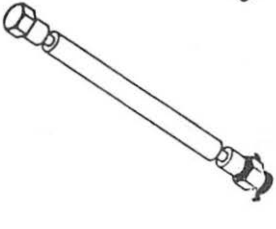


CONVERSION BRACKET/ CONVERSION KIT. MODIFIES A STANDARD WESTERN CONVERSION BRACKET TO A PIVOT PIN TYPE CONVERSION BRACKET.
PART NO. 6R1624-X



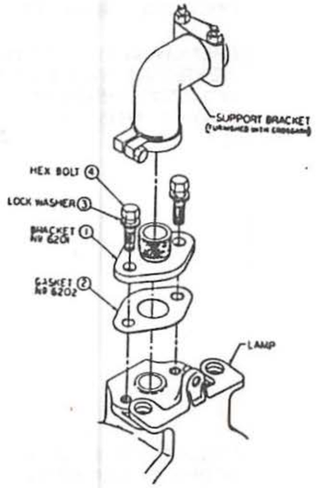
SHEAR PIN, ALUMINUM FOR GATEARMS 32' AND UNDER.
PART NO. 6R1571-X *

SHEAR PIN, ALUMINUM FOR GATEARMS 32' AND OVER.
PART NO. 6R1572-X *



8" AND 12" FLASHING LIGHT SIGNAL PARTS

WC950 8" FLASHING LIGHT PARTS:


SUPPORT BRACKET
(FURNISHED WITH CROSSARM)
HEX BOLT ④
LOCK WASHER ③
BRACKET ①
NO 6201
GASKET ②
NO 6202
LAMP

CONVERSION KIT TO ADAPT WESTERN
TYPE 950, 8" LIGHT TO STANDARD
CROSSARM ASSEMBLIES.
PART NO. 6B6201-X

BACKGROUND 8", FOR WC950
FLASHING LIGHT SIGNAL UNIT.
PART NO. 6B5018-1

HOOD 8", FOR WC950 FLASHING
LIGHT SIGNAL UNIT.
PART NO. 6B5019-1

RETAINING RING, FOR WC950
FLASHING LIGHT SIGNAL UNIT.
PART NO. 6B5020

WC960 8" FLASHING LIGHT PARTS:

BACKGROUND 8", FOR WC960
FLASHING LIGHT UNIT.
PART NO.

HOOD 8", FOR WC960 FLASHING
LIGHT UNIT.
PART NO.

GASKET, LENS WC960 FLASHING
LIGHT.
PART NO. 6B5020A

WC970 12' FLASHING LIGHT PARTS:

BACKGROUND 12", FOR WC970
FLASHING LIGHT UNIT.
PART NO. 6B5218

HOOD 12", FOR WC970 FLASHING
LIGHT UNIT.
PART NO. 6B5219

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